



A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
MITCHELL BROS. COMPANY { Vol. XXV.
(INCORPORATED).

CHICAGO, ILLINOIS, NOVEMBER 15, 1906.

No. 5. { ONE DOLLAR PER ANNUM,
SINGLE COPY, TEN CENTS.

THE NEW SANTA FE ELEVATOR AT CHICAGO, ILL.

If anyone has imagined that the usefulness of Chicago River as a means for grain transportation is nearly over, he will have an incentive to reflection in the fact that the Santa Fe Railway has seen fit to replace its former elevator, burned September 9, 1905, with a new structure of equal storage capacity and a handling capacity greatly in excess of that of the old plant. The new elevator is situated on a new slip, at Robey Street and the South Branch of Chicago River, just at the head of the Drainage Canal. The old site and foundations, al-

though adjacent to a power plant of considerable value, were abandoned to secure better track room, which was the earliest indication that the railway company intended to spare no legitimate expense in securing a high class elevator.

A rather full description of this new plant is justifiable because of the incorporation in it of many unusual, and in some cases unique, structural and operating features. First, as to the main points of the structural design, both standard and extraordinary. The plant comprises a frame working house of 400,000 bushels' capacity, with steel marine tower and steel track shed, a reinforced concrete storage annex of 1,000,000 bushels' capacity, a 1,500-horsepower plant and

drying and bleaching facilities. All buildings are on concrete foundations, piled.

The working house is of frame construction, with cribbed bins, the cupola resting on posts carried down through the bins to the bin girders. The outside covering is of brick up to the top of the bin walls, while corrugated steel is used on the cupola. The bottoms of all bins are of heavy steel plates, suspended from the bin girders. While this style of construction is somewhat more expensive than the ordinary wood bin bottom, with its mass of girders, posts, cants and aprons, the underwriters are so anxious to get rid of all the usual dust pockets that they offer for this bottom a substantial insurance re-



NEW SANTA FE RAILROAD ELEVATOR ON CHICAGO RIVER, SHOWING POWER PLANT, WORKING HOUSE AND CONCRETE BINS.
Plans and specifications by John S. Metcalf Co., Chicago; construction by the MacDonald Engineering Co., Chicago.

duction, which offsets the added cost of the steel bin bottom. The legs, heads and important spouts are also of steel.

Alongside the working house is a fireproof track shed extending over four tracks, with five unloading places on each track and ten car-loading spouts.

A steel marine tower, with a 6,000-bushel leg, is built on the water side of the house.

A drying plant with two No. 6 Hess Driers and a bleaching plant are provided.

The storage annex is of reinforced concrete, in thirty-five cylindrical bins and twenty-four interspace bins, the bin walls being 80 feet high.

The power plant is of 1,500 horsepower capacity and of a completeness unusual in elevator work. The two main engines are of the horizontal tandem-compound Corliss type, and the four boilers are of the internally fired "Continental" pattern, with Hawley Down-draft Furnaces for smoke consumption. All water is filtered before entering the boilers. A surface condenser, two 750-gallon fire pumps, a direct-connected electric light engine and generator, and a radial brick stack are important features of the power plant equipment.

The most important feature of the operation of the house are the facilities for car unloading. For the first time the outside unloading hopper has been made use of as advantageous over the method of hopping directly to the boot, for in the present case each hopper holds a full carload of grain. There are four hoppers tributary to each receiving leg, which has a capacity of 15,000 bushels per hour, as has a conveyor leading to it from its line of four track hoppers. Each set of four hoppers has its valves connected to an interlocking mechanism, with levers near the receiving leg, similar to the well-known interlocking switch arrangement on railroads. With this arrangement it is absolutely impossible to have the valves of more than one hopper open at one time, thus preventing the mixing of two carloads of grain. The crews unloading the cars communicate with the operator of the valve mechanism by an electric signal system, displaying lights of different colors for the different operations desired accomplished.

In addition to the five 15,000-bushel receiving legs there are five shipping legs of the same capacity, and for each of the eleven cleaning and clipping machines a separate leg of the full capacity of the machine is provided. Screenings, bleached grain, grain to be dried and dried grain are elevated in four additional legs.

Eight vessel loading spouts are installed above the dock.

It is perhaps needless to say that in so complete a plant as this a large car puller, a passenger elevator, complete telephoning, electric lighting and signalling systems, and hose service and fire alarm equipment are provided. The building is also furnished with a sprinkler system. It has been the intention that all machinery should be of ample size for heavy service, and the results of actual operation of the plant will be awaited with much interest.

The construction of the plant has been in charge of George E. Rex, assistant engineer, of the Santa Fe Railway, under W. B. Storey, chief engineer Santa Fe system, and C. A. Morse, chief engineer Santa Fe eastern lines. Several contractors have been engaged on the various portions of the plant, the main contractor being the Macdonald Engineering Company, Chicago. The entire work was done in accordance with complete detailed plans and specifications furnished by John S. Metcalf Co., engineer, Chicago.

The Santa Fe Elevator is run as a private elevator in the sense that, while it is not a class A house in the Chicago Board of Trade, it is a public elevator for cleaning and clipping grain, doing business in this line for the general public and also for taking grain in storage, grain being transferred for $\frac{1}{4}$ c a bushel, refunded by the eastern carrier. C. M. Boynton, manager of the company, is

located in the Board of Trade Building at Kansas City, and other local managers are Geo. L. Stibbins, Chicago, with offices in the Board of Trade Building; J. A. Theis, Kansas City; H. D. Butts, Galveston, Texas.

[For the "American Elevator and Grain Trade."]

GEORGE S. LOFTUS.

BY R. H., JR.

George S. Loftus of St. Paul is a man whom many regret President Roosevelt, in reconstituting the Interstate Commerce Commission after the passage of the Hepburn bill, did not see his way to appointing upon that body; and should there become a vacancy on the Commission it is certain his name will be strongly urged for the appointment;

the strength of Mr. Loftus with the shippers, who would like to see him advanced to a place on the Interstate Commerce Commission, where he can have a wide field of usefulness.

George S. Loftus is a young man, who has spent his entire life in Minnesota. He is big with the bigness of the West—virile, resourceful and unafraid. Like Roosevelt and Folk and Jerome, he has for years been hitting graft and unfairness wherever he has found it, until he has built up for himself unwittingly a popularity that is overwhelming. Farmers and shippers all over the country regard him as the champion of their interests, and they will stand by him to a man.

Mr. Loftus entered the employ of the Minneapolis and St. Louis Railroad in 1883, at the age of ten years, as office boy in the office of the vice-



GEO. S. LOFTUS, ST. PAUL, MINN.

for shippers in the Northwest and West, who are acquainted with his services to them through the Minnesota Shippers' and Receivers' Association, of which he is commissioner, feel there is no man in the country more qualified to do honor to the Commission or to serve the country in that capacity. Certainly it would be impossible for the President to select a man having a more comprehensive knowledge of rates and rate-making, from the point of view of both the railroads and the shippers. Mr. Loftus was an active railroad man for sixteen years, and has spent the last seven years in the grain commission business, during which time he has shipped thousands of cars of grain and hay to all parts of the country. His knowledge of railroad rate-making methods has made him invincible in the many battles he has fought against the railroads of the Middle West, one of which is in progress at the present time. So hopeless do the railroads find any fight in which the shippers, under the leadership of Mr. Loftus, are arrayed against them, that a few days ago a prominent railroad attorney openly charged Mr. Loftus in court with being "the cause of the shippers' discontent and the ring-leader" in the war against unjust discrimination and unfair rates. That goes more than any other one thing to prove

the strength of Mr. Loftus with the shippers, who would like to see him advanced to a place on the Interstate Commerce Commission, where he can have a wide field of usefulness.

A few weeks ago Mr. Loftus was elected vice-president of the National Hay Association, an association of commission merchants having a membership of several thousand. He is state representative of Minnesota to the Interstate Commerce Law Convention and Commissioner of the Minnesota Shippers' and Receivers' Association. The reciprocal demurrage bill was prepared by him, and he is the author of the famous circular, "What is the Matter with Minnesota?" He is a close friend of Senator La Follette, Ray Stannard Baker and Chester A. Legg, all of whom he has assisted in preparing their articles on the railroads, supplying them with facts and figures. In writing of railroad problems of the Northwest to the Boston Transcript, Mr. Legg said: "I can candidly say that George S. Loftus is one of the best grounded men in traffic problems, and especially in rates, it has ever been my pleasure to meet."

[For the "American Elevator and Grain Trade."]
**NEW ORLEANS AS A GRAIN AND
 ELEVATOR TERMINAL WITH A
 WORD AS TO ITS HISTORY,
 CUSTOMS AND SANITARY
 CONDITIONS.**

BY E. P. ARNOLD, C. E.

New Orleans, the chief city of Louisiana, is situated on the Mississippi River, one hundred and six miles above its mouth. The greater portion of the city lies on the left bank of the river, which here makes a bend, from which New Orleans derives its appellation, the "Crescent City." A great portion of the city lies below the mean level of the river, and is protected by the levee, or embankment.

The city is divided into four parts, to wit: The old part lying north of Canal Street, called the French Quarter; the new part, lying south of Canal Street, called the American Quarter; third, that part lying east of St. Charles and Royal Streets, called the River Side, being towards the river; and lastly, that part lying west of St. Charles and Royal Streets, called the Lake Side, it being towards Lake Pontchartrain.

The river front presents an outline somewhat resembling the letter "S," and is seven or eight miles in extent. This configuration necessarily renders the direction of the streets very irregular. The most important business thoroughfare is Canal Street, which runs at right angles to the river and divides the French Quarter from the American Quarter. The center of Canal Street, which is now known as neutral ground, was once the site of the old canal. The finest residences are on St. Charles Street, beyond General Lee's Monument.

New Orleans was founded in 1717, by Jean de Bienville, governor of the settlement made in 1699 at Biloxi, and became the capital of Louisiana in 1721, while still little more than a village of trappers and gold hunters. In 1757 it was ceded by France to Spain, but the inhabitants, rebelling against the transfer, established a government of their own and were not suppressed until 1769. From 1800 to 1803 New Orleans was again in the hands of the French, but in the latter year it was ceded with the rest of Louisiana to the United States. In 1815 the British were defeated here in an important battle by Gen. Andrew Jackson. New Orleans in 1862 surrendered to the Union forces under Gen. Benj. F. Butler, after Admiral Farragut had succeeded in passing the forts at the mouth of the Mississippi River and had the city under the guns of his fleet.

New Orleans is one of the most picturesque and interesting cities in the United States, owing to the survival of the buildings, manners and customs of its original French and Spanish inhabitants. The French Quarter is inhabited almost exclusively by Creoles; and among the foreign architectural features seen here may be mentioned the stucco facades, the gratings, the small-paned windows, the porte-cochères and the inner courts, airy verandas, beautiful gardens, groves of ornamental trees, among which the orange and lemon exhibit their fruit, while the magnolia, spreading its luxuriant shade, adorns and beautifies the city, the whole embosomed in bright flowering, semi-tropical plants. The famous carnival of Mardi Gras, celebrated here with great splendor, is the most picturesque festival in all America.

New Orleans is the outlet of the greatest agricultural valley in the world. It is the largest cotton market on earth, handling about two million bales annually; and bids fair to be one of the largest grain terminals. It also exports large quantities of sugar, molasses, rice, tobacco, and imports most of the fruit and coffee from Central and South America. The position of New Orleans is one of commanding importance when viewed in connection with the immense area of navigable waters (the shore line of which, including both banks, being estimated to be 35,000 miles in length) which find their outlet in this direction.

It is the commerce of New Orleans which gives

the city its distinctive character and extends its reputation throughout the world. This commerce has been gradually extending from the humblest beginnings; and so admirable is its position in this respect that vast as is its trade, it must continue to grow; and it is rapidly advancing to the first place as a grain terminal.

Western railroads keen for business are becoming aware of the fact. The Illinois Central, Queen & Crescent, the Louisville & Nashville, the Texas Pacific are all doing a large grain, freight and passenger business to New Orleans and the Gulf. The Frisco system has obtained an entrance, and the Pennsylvania system is endeavoring to obtain a terminal in the port of New Orleans. It has been found to be a much quicker and cheaper route for grain from the Northwest and Southwest to reach seagoing vessels, for American and foreign ships can come up to the docks at New Orleans regardless of their draft of water. The greatest obstruction to the commerce of New Orleans arises from the bars at the mouth of the Mississippi, occasioned by the immense amount of sedimentary matter brought down and deposited by the river. These bars in years past used to vary in position and in the depth of water upon them, almost every freshet occasioning some change in these respects, but the channel is now maintained at a sufficient depth for vessels of the largest class, by the jetties, designed by Captain Eades, placed near the mouth of the river.

Cheaper rates can be made by railroads to New Orleans and the Gulf than can be made to the eastern seaboard; or, in fact, a rate from the Northwest and Southwest can be made to New Orleans almost as low as can be made to Chicago from the same point; as railroads, under the interstate commerce law, can make a rate from St. Paul, Omaha, Kansas City or other points along the river to compete with the river boats. At New Orleans grain can be put aboard ocean-going vessels direct and cargoes may be consigned to any port in the world.

It was an axiom in Chicago and in the North, among operators in grain, that grain would not stand transportation through the South; but the facts do not bear out this assertion, as grain in bulk, in cars, from points north of St. Louis, arrives in New Orleans in good condition, provided it was in good condition when loaded into cars; but grain from points south of St. Louis and Cairo, as a general thing, is not in as good keeping condition when loaded into cars as the grain from the North. Grain operators and warehouse men in New Orleans do not claim that grain will keep as well as in the North; for New Orleans and all semi-tropical climates on and below the Gulf of Mexico not only have the heat to contend with, but the humidity, or moisture in the atmosphere, which, together with the heat, is not conducive to the keeping condition of grain. But grain does not remain long in New Orleans; it is simply a terminal, the end of the railroad, and the export station for grain on its way to foreign ports.

Ocean-going vessels and steamers come to the wharf to unload and to receive cargoes, both of which operations are done at the same time. When a hold, or a compartment in the steamship, is unloaded and in the dock-house alongside the wharf, the compartment is at once filled with grain from the grain elevator. The elevator being a quarter of a mile away from the wharf, the grain is carried on conveyor belts from the elevator to a conveyor belt running along the wharf, but above the roof of the wharf-house and about fifty feet above the surface of the water. Grain elevators along the Mississippi River are located from several hundred feet to a quarter of a mile back from the river in order to get a solid foundation, for one thing, and to insure them from being undermined should the river eat into the levee, or river bank, as it often does. This is why the Illinois Central Railroad constructed a frame wharf-house on its dock and set the more expensive concrete fireproof freight houses, together with the grain elevators, several hundred feet inland from the

river bank. All conveyors are enclosed in galleries, and the vessels being unloaded at the wharf-house are under the spouts of the conveyor galleries, and can be loaded as quickly as a lake steamer can be in Chicago. The cargo goes direct to the port of destination, not having to be unloaded, reloaded or transferred en route.

The Mississippi River is over 100 feet deep at the wharf at New Orleans along the levee, and the center of the stream is about 300 feet deep; hence there is no lack of water and the largest vessel afloat can come to the wharf. For example, the steel steamer Louisiana, freight and passenger boat between New York and New Orleans, while unloading freight at the wharf along the levee opposite the French market, listed towards the river. The ports being open, the water entered, and she foundered at the wharf. She now lies on the bottom, 165 feet below the surface at the wharf. So, too, the U. S. S. Texas, when at New Orleans during the early part of the year, was anchored close to the Algiers side of the river. The officer of the deck being asked, "Why so near the shore?" said, "We have not anchor chain enough to reach bottom; it is 300 feet deep in mid-stream."

There are seven grain elevators in New Orleans. The Illinois Central Railroad has three (one in the city and two new elevators recently constructed to replace the two destroyed by fire on the Stuyvesant docks); the Texas Pacific has two modern elevators across the river at Westwego; and there are two elevators at Chalmette.

The Stuyvesant Docks of the Illinois Central Railroad are a mile long and are located along the Mississippi River between Louisiana Avenue and Nashville Avenue. The freight and cotton warehouses are of concrete and brick, of fireproof construction, with the exception of the wharf-house, about one mile long, along the wharf of the river; this is of frame construction, for reasons above shown. The grain elevators are of cribbed construction, metal-clad on the outside, of about one million bushels' capacity each, and are modern. Each elevator has a pneumatic grain drier as part of the equipment (as all grain elevators in the South should have).

The Texas Pacific Railroad has two modern grain elevators across the river at Westwego, similar in construction to the Illinois Central elevators. Each of the grain elevators, as shown above, is equal to a Chicago plant of the same capacity. The other lines referred to, entering New Orleans, propose to construct modern grain elevators in order to compete for the grain business, as the export grain trade via New Orleans has a future.

Grain is inspected in New Orleans in the same way that it is inspected in Chicago, but the inspection department is under the jurisdiction of the New Orleans Board of Trade. Cars are inspected on tracks; receipts issued by the elevator company are registered by the Board of Trade, which guarantee the same in practically the same way as did the old inspection department of Chicago when under the jurisdiction of the Board of Trade, before the state of Illinois took hold of it. Grain insurance companies also have their own inspectors, who inspect, sample, insure and guarantee cargoes to arrive in foreign ports, or port of destination, in good condition.

The outlook for the future of the grain trade in New Orleans is promising, but New Orleans has some drawbacks as a city. The yellow fever sometimes makes its home for a season in the city, and, with its ostensible enemy, the quarantine, has a depressing affect on business. The sanitary, or, rather the unsanitary, conditions of the city are being improved in order to keep out "Yellow Jack" and to steer clear of the quarantine, and this work has been successful this year and may be for a number of years; but the city outside of the center has little or no sewerage. The filth of the city runs in open ditches on either side of the streets and the odor arising from the ditches and out-houses is not to be forgotten; it is always with you when in New Orleans. The city being below

the river level, the sewerage has to be pumped up over the levee, but only a small part of the city has a sewerage system. As a sanitary solution of this problem, the city should be divided up into sanitary districts, basins should be sunk in each district; sewer pipes and laterals should be put in, with fall enough to drain to the central basins, and water taken from the river to flush the sewers and laterals; and finally pumping stations at each central basin should pump the sewerage from the sunken basins into the river or into Lake Pontchartrain, all of which work will take time and a large amount of money.

The fire and water systems of New Orleans are poor. There are 4-inch to 6-inch water mains on the principal streets, and the water is pumped from the Mississippi River to these mains. It is not fit to drink, unless filtered, and I failed to find a dozen filters in New Orleans; and it is not of much more use for fire protection, as the head of water, or pressure, in the mains is only about eight feet. So there is plenty of room for improvement. The water used for drinking purposes is mainly rain water, obtained from the roofs of the houses and stored in wooden cisterns set about four feet above the ground and rising to the eaves of the roof. This water would be fair, if any provision was made to clean out the cisterns, but most of them are never cleaned from the time first constructed until they fall into decay from old age. This alone is a source of considerable sickness. There are no wells in New Orleans that can be used for drinking purposes, as the water is brackish or salty. The best drinking water is the river water, when properly filtered, but filters are hardly known in New Orleans.

There are no basements in New Orleans. The city is almost surrounded by water, by the Mississippi River and Lake Pontchartrain, the water being about seven feet higher than the level of the city and is kept out of the city by the levee, or an embankment of earth around the city. In the early history of New Orleans, before the levee was constructed, the land was a little higher than the river, except in the swamps, by which New Orleans is surrounded. In after years, a levee a foot or two in height was constructed to keep the water out of the city, and in the spring of the year the river would rise and cover all the lowlands for a thousand miles above New Orleans, but the rise at New Orleans would be only a few feet. Then to keep the lands above from overflow, a levee was constructed for hundreds of miles to keep the river in the channel between the levee banks. Like the Yellow River of China, the sand from above is carried down and deposited on the bottom of the lower river to the extent of about two feet per year, so that the more the river is confined to its banks the more rapidly the surface rises above the former level at New Orleans. The normal stage of water is now about seven feet above the city, and in high water it is nearly twenty feet; and based on information furnished by the old inhabitants, who have been on the ground for over sixty years, it would seem that twenty years hence, with a proportional rise, the river will be thirty feet above New Orleans. The ground in and around the city is soaked with water, seepage from the river; so that with a few more feet of rise in the river, the seepage alone will be a great problem for engineers.

There are no suburbs to New Orleans, as the city is surrounded by water and swamps for forty miles. The Queen & Crescent Railroad, to enter New Orleans, had to construct twenty miles of trestle or bridge over part of the swamps and Lake Pontchartrain.

From New Orleans to the Gulf by the river it is 106 miles. Going through the canal at Westwego (across from New Orleans) a boat can reach the Gulf in 48 miles. Lake Pontchartrain is a part of the Gulf of Mexico and is only two miles from the river at New Orleans.

Coming events cast their shadows before. Engineers will some day study these features of the map of the Crescent City and environs.

ONE OF THIRTY-TWO.

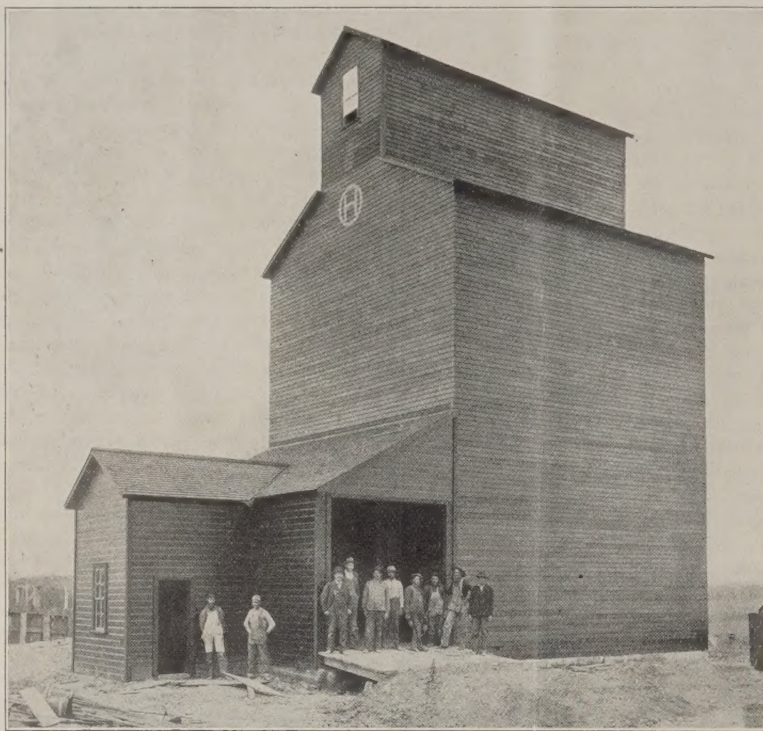
The Hoffmans are among those who were the pioneers of Kansas, the founder of the family, C. Hoffman, having gone to that state from Switzerland in 1858, settling in Dickinson County, on the extreme frontier, when his house was the "last white man's house" facing the plains, then occupied only by the Indians. He built one of the early mills of the state at Enterprise, which is to-day, in fact, the oldest mill in the state that has been in continuous operation (since early in 1869). When C. Hoffman's son, C. B. Hoffman, grew to manhood, the firm of C. Hoffman & Son was organized, and now the grandsons are interested in the business.

From milling the Hoffmans naturally went into grain; and the Hoffman Elevator Company of Enterprise is now managed by C. Hoffman, president; T. L. Hoffman, vice-president; R. W. Hoffman, treasurer, and E. V. Hoffman, secretary.

free for inspecting, sampling and reconsigning in transit, it being understood that the freight is not to be removed from the car or contents changed, and that the sampling or inspecting is to be performed upon the hold tracks of the railroad company, and does not contemplate switching of the car by request of consignor or consignee. Where the car is unloaded or a change of load is made, or it becomes necessary to switch the car by request of consignor or consignee, one period of twenty-four hours' free time will be allowed for unloading and one period of twenty-four hours' free time will be allowed for reloading." In calculating free time Sundays and legal holidays are excepted.

REBATING AT MINNEAPOLIS.

The United States grand jury at Minneapolis, on November 8, threw a bombshell among railroad and elevator men by handing in a series of indictments against railroad officials and grain operators,



HOFFMAN ELEVATOR CO.'S HOUSE AT VICTORIA, KAN.

They own and operate thirty-two houses on the lines of the Union Pacific, Rock Island and Santa Fe systems, of which the house shown in the picture is a type. It is located at Victoria, and is modern in every way for country station service.

DEMURRAGE IN UTAH.

On complaint of the grain men of Salt Lake City, the Utah railroads have modified their rules to give twenty-four hours' free time to grain cars for inspection and sampling in transit. Hitherto this privilege was not allowed, and grain men naturally complained that without the right to examine the consignments moving under their direction and responsibility they had no way of seeing whether they were being treated squarely or not. Without permission to open and examine a car at some intermediate point, they might pay for more grain than was really moving. This would mean a loss at both ends of the transaction, as they would also have to supply the shortage noticed by the consignee. They explained that in being responsible for a consignment they would be forced to pay costs of returning a consignment refused by the consignee for causes which they could eliminate, were they permitted to examine the car before it reached its destination.

The new rule, effective November 15, allows a stop in transit (when permitted by legally published tariff) of "one period of twenty-four hours

charging them with violations of the United States laws forbidding rebating, etc.

The first action, on October 23, of the grand jury was to give the "immunity sweat bath" to C. S. Corl, of the Devereaux Grain Co.; R. G. Kyle, agent for the Great Northern at Minneapolis Junction; Geo. G. Ingram, of the Great Northern freight claim department at St. Paul; F. E. Draper, auditor of the Great Northern at St. Paul; R. W. Bryan, superintendent of transportation of the Great Northern at Superior, Wis.; W. J. Powers, general agent of the freight department of the Great Northern at Duluth.

Then follows the inquisition held behind closed doors; but one rumor was to the effect that a rebate of $\frac{1}{2}$ cent per bushel had been received by a prominent grain firm for all grain shipped over the Great Northern; and another that the Wisconsin Central was allowing an "elevation charge" to a shipper "to overcome or offset its terminal disability;" others that there has been an absorption of switching charges, and a manipulation by allowances for grain doors. All of these forms of rebates are said to have been discontinued when it became noised about the Minneapolis Chamber of Commerce that at least one firm was waxing fat on special concessions; for other elevator lines which attempted to get the favors were refused, it is said, which created a discrimination and a row.

The indictments returned were against the Wis-

consin Central, the Minneapolis & St. Louis, the Chicago, St. Paul, Minneapolis & Omaha and the Great Northern railroads and the McCaull-Dinsmore Grain Company, as follows: Six indictments containing 100 counts and naming five officials against the Great Northern Railroad; one indictment, containing seventeen counts, against the Wisconsin Central, naming two officials; one indictment, containing five counts, against the Minneapolis & St. Louis, naming one official; one indictment, containing fifty counts, against the Omaha road, naming three officials. The indictment against the McCaull-Dinsmore Company contains five counts, charging the acceptance of rebates. The railroads and their officials are indicted for giving rebates. The minimum penalty for conviction on each count is \$1,000 and maximum \$20,000. The general offense alleged in the railroad indictments is the absorption of grain elevator charges.

The Duluth-Superior Milling Co. and the Ames-Brooks Co. of Duluth were also indicted.

The indictments came as a complete surprise, it is said, for the reason that the inquisitorial jury did not call any of the big people of the roads, nor anyone connected with the McCaull-Dinsmore Grain Company, but only men of subordinate rank or of clerical positions.

CANADIAN GRAIN COMMISSION.

Continuing the enquiry into the conditions of the grain trade of Canada, the Royal Grain Commission held sittings at Toronto, where among other things Mr. L. Goldie, a miller of Guelph, expressed the opinion that the terminal grain elevators should all be controlled by the government; that they should be subject to as close supervision as the distilleries. As matters now stand, buyers of elevator grain are never sure of getting their own grain, as in some of the elevators they can never determine who they are dealing with. Mr. Goldie said that he recently bought a consignment of old Manitoba wheat, but when the grain arrived he found that a large portion of it was new wheat. He had sent for the inspector, but that official refused to give him a certificate that it was new wheat, and would only go so far as to express the opinion that the consignment contained new wheat mixed with old wheat.

Peter Scherk, of Scherk & Snyder, millers, Bridgeport, said that he was anxious to see adulteration of mill feed stopped, and would favor the appointment of government inspectors. He thought that mill feeds should be defined and labeled. There is no harm in selling screenings, provided they were so represented, but it is fraud to mix them with shorts and sell them as pure mill feed.

R. L. D. Taylor, grain merchant, who deals extensively in mill feeds, handling the screenings from Manitoba wheat, said he would approve of legislation compelling the screenings to be separated and properly cleaned and not permitting them to be sold in the raw state. He put in a plea for what is termed obnoxious weeds, maintaining that nearly all these weeds are commercially valuable.

D. B. Hanna, third vice-president of the Canadian Northern, said the elevator rates at Port Arthur are $\frac{3}{4}$ of a cent for 15 days' storage and delivery. The elevator guarantees the owner of the grain from loss, although he would not admit that $\frac{1}{4}$ per cent of the rate charged is for insurance, on which the elevator company makes a profit. He expressed the opinion that there should be government inspection of elevators at Georgian Bay points.

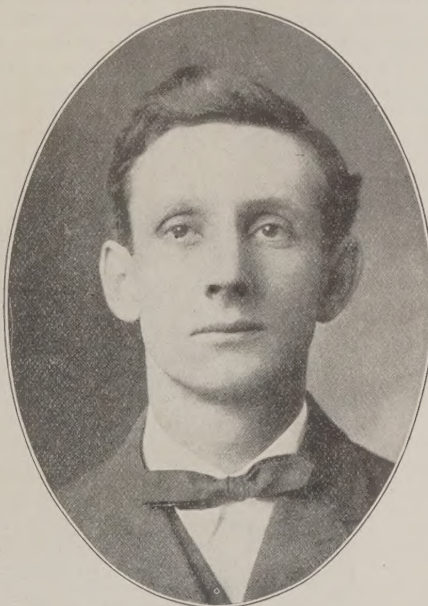
The Commission then completed its labors in the East and leaving Toronto went to Buffalo, thence to Goderich, Chicago and Minneapolis before returning to Winnipeg. At Buffalo the methods of handling grain were looked into; at Goderich the new concrete elevator of the Goderich Elevator and Transit Co. was inspected, and at Chicago and Minneapolis local exchange methods were studied.

After a short recess, the Commission reassembled at Winnipeg, from which city they proceeded to Portage la Prairie, where on November 5 they began hearing complaints filed by the grain growers. Sessions were subsequently held in the following towns: Brandon, November 7; Cypress River, November 9; Carman, November 12; Manitou, November 14, and will be at Deloraine on November 16.

A. R. THOMPSON.

Life is short, but the man who keeps doing things manages to crowd a lot of experience into a few years; and so, at a really early age, some men acquire the wisdom as well as the reputation of an "old and experienced man."

Now A. R. Thompson of Ypsilanti, N. D., is to be classed among the young men, being only thirty-one years of age; but he has been for five years bookkeeper for a firm operating in the Duluth Board of Trade, auditor for four years for A. D. Thompson & Co.'s elevators at Sioux City, Iowa, and grain buyer for five years for the Min-



A. R. THOMPSON, YPSILANTI, N. D.

nesota and Western Grain Co. at their country elevators; and withal he managed to wedge into this busy life two years of a sailor's life on the Great Lakes, operating between Duluth and Buffalo.

At present Mr. Thompson is manager of the Star Elevator Co. and in charge of their elevator at Ypsilanti, a 45,000-bushel house, to the duties of which dual position he brings a thorough schooling in all branches and departments of the grain business.

CANADIAN GRAIN ACT.

Fred. Holden, manager of the McLaughlin & Ellis Elevator at Indian Head, Man., on October 30, pleaded guilty to a charge of securing a name as an applicant for a grain car and was fined \$50 and costs.

John Hutton, a farm hand, was charged with securing the car, he being an applicant within the meaning of the grain act, and also with transferring his right to a car placed to his order. He pleaded not guilty to both charges. The cases of violation, however, were very clearly proven.

Hutton was fined \$50 with costs with the first charge, and \$25 with costs on the second. This is the first conviction under the grain act as amended at last session of Parliament.

An Ohio doctor, on his farm near Dayton, claims to have found on a single stalk four ears of corn that averaged $15\frac{1}{2}$ inches long and 14 inches in circumference, the four weighing 10 pounds.

[For the "American Elevator and Grain Trade."]

A FRENCHMAN'S STATEMENT OF FACTS PERTAINING TO CEREAL PRODUCTION IN THE UNITED STATES.

PREPARED BY L. C. BREED.

Under the title of "The United States in the Twentieth Century," Pierre Leroy-Beaulieu has presented to his countrymen a very valuable and unprejudiced study, or inventory, of the economic resources of the United States at the beginning of the present century. He states that the present book is based on a careful examination of American documents and his own personal investigations during a recent visit of some months' duration, consequently it is one dealing with facts; though as he himself points out, as everything changes and grows so quickly in America, brief as is the time which has elapsed since the book was written, some of the statistics presented may not exactly correspond to the state of affairs to-day. While making due allowance for this able author's possible errors, the writer is led to believe that the readers of the "American Elevator and Grain Trade" will find his presentation of facts, and the inferences he has drawn from these facts, of interest and value, a selection of which relating to grain production, is given below:

The surpassing importance of cereals in the agricultural wealth of the United States may be indicated in a few words. They represent more than one-half the total value of the country's crops, their value being \$1,484,000,000 out of a total \$2,910,000,000. The land cultivated for cereals, 184,994,588 acres, constitutes 44 per cent of the total of improved land, and nearly two-thirds of the total of cultivated lands, properly so-called, which yield an annual harvest.

It is not uninteresting to compare these figures with the statistics we possess concerning the cereals of France. According to the agricultural inquiry of 1892, instituted at about the time when the agriculture of France was most prosperous, cereals occupied an area of 37,000,000 acres out of a little less than 85,000,000 acres, corresponding to the "improved land" of the Americans, and out of 63,000,000 acres producing crops. The proportion was then (and is still) almost the same in France as in the United States. In respect to the value of the product, however, cereals play much the less important role in France. Even by adding to the value of the grain the value of the straw, concerning which the American statistics are silent, French cereals are far from attaining the percentage shown by the cereals of the United States. Forage growths, the grape vine and sugar beet, swell the French total, compensating for the complete absence of that trans-Atlantic industrial culture, cotton.

All the world knows how rapid has been the progress of cereal production in the United States. There is no slackening. Indeed, there is palpable acceleration. The census of 1880 gave 118,805,952 acres under cereals; that of 1890, 140,378,857 acres; that of 1900, 184,994,588 acres. The increase is thus more than 44,000,000 acres, or 31 per cent from 1890 to 1900, in place of 21,000,000 acres, or 18 per cent from 1880 to 1890. For the twenty years the increase has been no less than 65,000,000 acres, or 56 per cent.

It goes without saying that the gain has not been equally distributed in all parts of the country. Of the 65,000,000 acres added during the past two decades, 10,000,000 are to be put to the credit of the two Dakotas, entered by colonization virtually twenty years ago and then possessing only 500,000 acres under cereals. Three other states, neighbors of the two preceding—Minnesota, Nebraska and Kansas—have each gained from 7,000,000 to 8,000,000 acres, or 23,000,000 for the three, a three-fold increase in sowings. Thus 33,000,000 acres, or almost half the total gain, must be credited to five states, which in 1880 were practically virgin.

The geographical group comprising these states is completed by Iowa, the development of which, however, was far more advanced twenty years ago, when it already had 11,500,000 acres under cereals. Still, it, too, shows the remarkable gain of no less than 5,000,000 acres. So that out of a total of 65,000,000 acres, 40,000,000 are contributed by these six states, situated on the western bank of the upper Mississippi and on each side of the middle Missouri.

Passing south from this group of highest activity, another group is found boasting remarkable gains in cereal production. This group consists of Oklahoma, Indian Territory and Texas, all of which, but especially the two first, may be called "new." In 1890, Oklahoma, which was then opened for the first time to colonization, did not have 20,000 acres under cereals; in 1900 it had close to 3,000,000 acres thus cultivated. Indian Territory, of which an exact census was taken for the first time in 1900, but of which it may be confidently asserted that it possessed almost no cultivated land twenty years ago, had, according to the 1900 census, about 1,600,000 acres under cereals. Finally, Texas more than doubled its sowings, showing an increase over 1880 of nearly 4,000,000 acres. The increase of the three taken together was about 8,000,000 acres.

In the eight states and territories lying between this zone and the states bordering on the Pacific, the production of cereals in 1880 was insignificant as the population was sparse. Since then there has been a notable increase in population, but hardly any development in the direction of cultivating the land. In none of these immense territories, each of which has an area of from 50,000,00 to 90,000,000 acres, has there been a gain in cultivated land of more than 500,000 acres. Not only has agricultural colonization left these states comparatively untouched, but at best it can only make a feeble impression on them, because they are insufficiently watered. One must pass beyond this arid region, pass even to the shores of the Pacific, before one will find new lands available for agriculture. But it must be said that in the three Pacific states themselves the gains shown in the way of cereal production are much less than might have been expected. From 1880 to 1890 California increased its sowings only by 1,500,000 acres, or 65 per cent. Oregon did not quite double them with a gain of 600,000 acres. In the extreme Northwest, however, Washington, which had only 135,000 acres under cereals in 1880, had fully 1,350,000 thus sown in 1900. For the three states the increase totals only 3,500,000 acres, a gain in no wise comparable with the progress shown by the great central strip.

East of this strip some good gains are found in the country lying between the Ohio and the Great Lakes and roundabout the middle Mississippi Valley, Illinois, Michigan, Missouri, Indiana and Ohio each show an increase of from 1,000,000 to 2,500,000 acres. Furthermore, the majority of the Southern states, which formerly had neglected the production of cereals, are now paying more attention to it. This is especially true of Arkansas and Louisiana, the former having nearly 3,000,000 acres under cereals, as against 1,500,000 acres twenty years ago, and the latter boasting 1,500,000 acres in place of the 800,000 acres of 1880. Nearly all of the others have gained more or less. In fact, this relatively older region has, in this respect, advanced more rapidly than has the far West.

On the other hand, there is one large section in which, so far from increasing the production of cereals, has actually lost ground during the past twenty years. This section comprises the old states bordering on the Atlantic—New England and the Middle states and Virginia, with the exception of Pennsylvania, and even in that state the increase is so slight as to be negligible. Taken as a whole, this region of early colonization of mediocre and often exhausted soil,

imposing high expenses on the cultivator, suffers as does Europe, from the competition of the West. Grazing and the production of milk have largely taken the place of husbandry. And even these new methods of utilizing the soil hold their own with difficulty, for the development of refrigerating processes has allowed the products of the West to invade their markets. Pennsylvania, which in 1880 still ranked seventh among the cereal states, was fifteenth in 1900; New York had fallen from the thirteenth to twenty-first place, with a decrease in the area under cereals of 550,000 acres or 15 per cent.

Owing to these variations a notable displacement of the center of cereal production has been brought about. In 1860 the center was in Indiana, not far from the Ohio line. By 1880 it had passed into Illinois. By 1890 it had almost reached the western boundary of that state. It has now crossed the Mississippi River, the census of 1900 placing it in Iowa. This movement toward the west has been accompanied by a displacement in a northerly direction. Minnesota, the two Dakotas, Iowa and Nebraska are to-day the great centers of production. It should be observed that the westerly movement, however, was perceptibly slackened during the last decade. Instead of advancing nearly 125 miles, as it had regularly done during each of the pre-

der is a vast expanse of wonderful fertility still awaiting colonization. This is why so many Americans are emigrating to Canada. In the United States itself, however, if cereal production is to continue to increase, there must be a development of the vacant land found in states already colonized, land which, without being worthless, is neither of remarkable fertility nor of good location. That such a movement is actually under way at the present day is shown by the census statistics.

"Wheat, which to us Frenchmen, on account of the role it plays in the foreign trade of the country, is the most interesting American cereal, has its chief production in Minnesota, the two Dakotas, Ohio, Indiana, Kansas and California. It also constitutes almost all the cereal production of Washington and Oregon. For some years past (1893-1902) the proportion of the quantity exported to the total production has never been less than 31 per cent, while in 1894, 1898 and 1901 it amounted to 40 per cent."

A STITCH IN TIME.

In the October issue of the "American Elevator and Grain Trade" we published a series of plates illustrating a method of lining cars to insure against leakage of grain. One of the plates showed



A BROKEN DOORPOST.

vious decades, the center advanced only about 25 miles.

Here is a significant fact, concerning which the Government report has this to say: "The suspension of this westerly movement in the last decade raises the inquiry whether the westward progress is not approaching its limit, and whether the future growth of cereal production will not depend more upon methods of agriculture and less upon the opening of new lands in the West?" In very truth there appears to be a dearth of new land. No longer, as was the case in 1880, are there vast stretches of virginal soil between the western confines of colonization and the eastern confine of the semi-arid zone. To-day the boundaries all but meet.

"By this I do not mean to say," says the Leroy-Beaulieu, "that there is not in the recently colonized states, and outside of the arid zone—in Minnesota, in Iowa, in the two Dakotas, in Kansas and in Nebraska—land not yet opened up and suitable for cereal production. Such land there is and in great quantity. But the quality is deficient. Almost every section having moisture sufficient for agricultural purposes has been invaded by colonization, which is to-day in possession of all the really good land. As a matter of fact, all the lands that are left in point of virginal country, where even the most fertile soil is yet unoccupied, are some sections of Indian Territory, which will soon be available, and certain parts of Texas, Washington and Oregon. On the other hand, north of the Canadian bor-

der is a vast expanse of wonderful fertility still awaiting colonization. This is why so many Americans are emigrating to Canada. In the United States itself, however, if cereal production is to continue to increase, there must be a development of the vacant land found in states already colonized, land which, without being worthless, is neither of remarkable fertility nor of good location. That such a movement is actually under way at the present day is shown by the census statistics.

This car which was unloaded at South Chicago, was leaking badly from a broken doorpost, and some of the grain can be seen lying on the ground where the car was photographed. Shippers cannot be too careful in examining cars and putting them in shape before loading, as a "stitch in time will save nine" in the grain as well as in any other business.

Mark A. Carleton, cerealist of the United States Department of Agriculture, is assisting railroad officials of St. Louis in preparing an agricultural lecture train to run through southern Missouri. A course of lectures will be delivered by an authority on cereals.

Close students of the grain movement at Duluth will notice a discrepancy between the bushels unloaded into elevators and the cars reported. This is accounted for by the fact that after a car is inspected it may be from two to ten days before it gets to the elevator. At the beginning of the season it was two to three days, but as the season has progressed the yards at inspection points Sandstone, Cass Lake and Staples have become more congested and it is now hard to tell when a car "on track" will get to the elevator.—Commercial Record.

THE GRAIN WEEVILS.

The warm, humid weather that prevailed much of the time during the past summer and early fall was extremely favorable to the development of insect life and, therefore, it is not surprising to learn that bugs which infest mills and elevators are very much in evidence. Among other pests that have become troublesome are the grain weevils, which are reported from a number of different states.

Although many of the insects which attack stored grain are popularly referred to as "weevil," there are but two species of true grain weevils, the granary weevil (*Calandra granaria*) and the rice weevil (*Calandra oryza*). These two insects are much alike in appearance and



THE GRAIN WEEVILS.—*Calandra Granaria*.
a, larva; b, pupa; c, rice weevil; d, granary weevil. Small figures show actual size.

habits. They are small, flattened, brown snout-beetles, neither being more than a sixth of an inch in length. Their heads are extended in the form of a long snout, to which the antennæ are attached.

The granary weevil attacks wheat, corn, barley and other grain, and as it breeds very rapidly is extremely destructive. The mature weevil is from an eighth to a sixth of an inch in length and is of a lustrous brown color. The larva is white and considerably shorter than the adult. It is without legs, but is very robust. The pupa is also white, clear and transparent, exhibiting the general characters of the future beetle.

The female lays her eggs in the grain after



THE FOREIGN GRAIN BEETLE.—*Cathartus Advena*.
Much enlarged. [After Chittenden.]

first puncturing holes in the kernels with her snout. When the larva is hatched it feeds on the substance inside the kernel and here undergoes its transformations. A grain of wheat or other small grain furnishes an abode for but a single larva, but a kernel of corn furnishes food and habitation for several individuals. The adult weevils also feed on the grain, gnawing into the kernels for food and shelter, probably doing even more damage than the larvæ.

The rice weevil, which is commonly, though erroneously called "black weevil," is found in every state in the Union, but is most destructive in the South and Southwest. It feeds on rice, wheat, corn, rye and other grains, and the adult beetles, when present in great numbers, frequently attack flour, meal and other manufactured products.

The species, while resembling the granary weevil in size and general appearance, is dull brown in color and has well-developed and serviceable wings. The larvæ and pupæ are also similar to those of the granary weevil, and in

habits and life history these two species do not materially differ, except that the rice weevil may often be found in the field remote from the granary. In the extreme South it lays its eggs in standing grain.

The most effective remedy against these insects is bisulphide of carbon. It may be applied directly to the infested grain without injuring the latter in any way, either for food or seeding purposes, but probably the best results are obtained when the liquid is evaporated in shallow dishes or pans, or on bits of cotton waste distributed about on the surface of the infested grain. The liquid rapidly volatilizes, and being heavier than the air descends and permeates the mass of grain, killing all insects and other vermin present. Twenty-four hours is generally long enough to clean out the weevils, but the grain may be exposed to the bisulphide for much longer periods without affecting its milling quality. Care should be taken that no fire of any kind be allowed in the mill or elevator until the fumes have entirely passed away.

The tendency of the uninformed to classify all grain destroying insects as "weevil" is shown by a report from Kansas which stated that "little brown bugs," presumably weevil, were doing damage in a certain territory. Several parties wrote to E. A. Popenoe, Entomologist of the Kansas State Agriculture College, with the result that the insects were classified as the Foreign Grain Beetle (*Cathartus advena*).

This insect is widely distributed and feeds on grain and grain products. Regarding its destruction, Professor Popenoe says:

"To destroy this beetle I have always recommended the free use of carbon bisulphide, and those who have tried it report success where the work is well done. On account of the frequent impossibility of making the bins anywhere near gas tight, I have suggested the increase of the amount customarily recommended to 1 pound to 600 cubic feet of capacity of bin, instead of to 1,000 cubic feet as generally recommended. I think it safer to thus increase the amount than to risk the disappointment of the owner in his experiment."

INSPECTION LABORATORY AT BALTIMORE.

The directors of the Baltimore Chamber of Commerce are much pleased with the establishment of the Government's grain inspection laboratory at that point, and so confident are local exporters of grain that the establishment of the laboratory should give an impetus to their business in the movement of the present corn crop, that circulars have been printed in English, German and French and mailed to all the European correspondents of local firms. The circular prepared was signed by Mr. Douglas M. Wylie, president, and Henry A. Wroth, secretary, of the Chamber of Commerce, and it says:

There is no intention of making this a Government inspection, but the aim is to assist our inspection department and the commercial organizations in securing a more uniform grading of corn, which can only be done by experimenting, for probably several years, as they have no basis themselves for knowing what minimum moisture in corn will make it safe to carry under varying conditions or climatic influence.

The Government officials will work closely with our inspectors and the corn committee and give the benefit of any suggestions that may be deduced as the work progresses to safeguard the interests of all concerned.

It is to be distinctly understood that the official inspection certificate of the Baltimore Chamber of Commerce will be the only certificate issued, as heretofore.

It is interesting to know from the Washington officials that of thirty-five shipments, aggregating 124,826 tons, which their representative examined on arrival in Europe, from January to May, 1906, ten shipments from Baltimore, representing 42,125 tons, or more than 30 per cent of the total, showed a much smaller percentage of damage than from any other Atlantic port.

In this connection, however, we would state that specific mention was made of five cargoes of this

lot, showing main damage was in the holds, adjoining boilers and machine rooms.

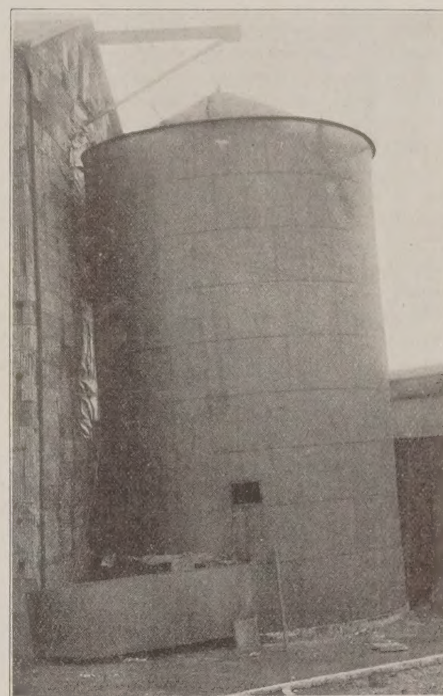
We feel confident that our work as outlined will show intending buyers that we consider their and our interests mutual, and we expect to maintain our position as the leading corn export market of the United States.

FAILURE OF A WHEAT TANK.

A peculiar accident occurred at Alton, Ill., on October 13, when a steel wheat tank belonging to the Sparks Milling Company gave way and allowed a portion of its contents to run out on the ground.

The tank was quite full, containing 33,400 bushels of wheat. It is 30 feet in diameter and 55 feet high, and had been standing full of grain since the first of August.

The immediate cause of the accident was an attempt to draw some wheat from the tank. This action appeared to set up an additional strain and



WHEAT TANK AFTER THE BREAK.

the rivets began breaking between the first and second rows of sheets. Once started, they ripped right around until the upper part telescoped over the lower sheet, the whole structure falling six feet. As will be noted from the accompanying picture, many of the lower sheets were crumpled up like paper. The tank fell against a wooden elevator, which probably prevented it from falling entirely over.

About 5,000 bushels of grain ran out on the ground around the bottom of the tank. At the end of the fourth day after the break the company had every bushel of wheat removed into the mill and elevator, and the loss on the grain did not exceed \$50 outside of the labor entailed. The loss on the tank will be heavy, as it will require almost as much labor to rebuild it as it would to erect it new.

The grain crops in the Northwest are immense, and scheduled grain liability is coming to the insurance companies in unusually large amounts. Most of the former abuses of writing schedule grain at less than tariff rates have been done away with. Many companies, however, hold that schedule grain lines are not entirely desirable, as open policies are often issued for fifty elevators, upon which certificates are issued for indemnity as needed. This open policy stipulates that the company is not to be held for any excess of a certain amount in any one elevator, and most companies are binding themselves for an amount in each location far in excess of their usual country elevator line.

[For the "American Elevator and Grain Trade."]

THE EXPERIMENT STATIONS.

BY L. C. BREED.

In considering the work of the experiment stations, it should be clearly understood that they are the property of the people. The scientific men under whose immediate control they are conducted, while responsible to the national Government, yet come into close relation both with farmers and to some extent with those who sell their products. The latter class might and could encourage and aid them in their work to a greater extent than is the case. Furthermore the trade, meaning especially dealers in grain and feed, might derive more benefit than they do, if they kept themselves more fully in touch with these stations.

It is well to call attention to the fact that these stations issue bulletins at stated periods, at least once in three months, or, in case of some states, more often. A good deal of information in these bulletins has a direct and practical bearing on the business of the dealers in grain, feed and fertilizers. Besides this, any dealer who writes to the officer in charge of the station of the state will receive promptly a reply answering his inquiries in so far as the officer is able to do so; and in case of parties paying a visit to these stations, he will see to it that they receive good attention and learn many facts of interest.

The stations are constantly conducting original researches in the lines of physics, chemistry, botany, geology, meteorology, agronomy, horticulture, forestry, the physiology of man and animal, veterinary science and animal industry, dairying, rural engineering and other related lines; and in addition to these, they take up any question of immediate interest, such as, for example, the eradication of insect pests threatening crops or orchards. They give free expert opinion on the character of soil or the healthfulness of a water supply. They test any certain food which may have fallen under suspicion and determine whether or not it is fit to eat, giving the inquirer precisely what the compound is made of.

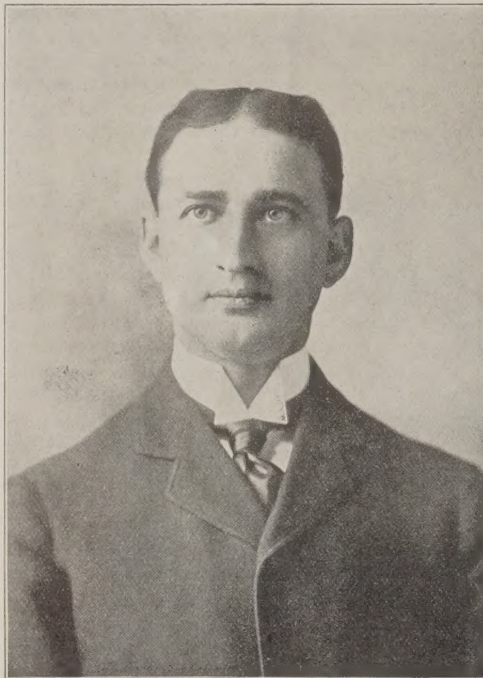
To particularize, it may be stated that grain and feed dealers may procure an analysis of any new feedstuff free of expense, or information concerning the analysis of any kind of feed or grain which may have been previously examined by the station. Most stations are provided with stock, and so are able, by feeding these animals, to make practical tests of feedstuffs with a view to corroborating the correctness of the chemical tests which had previously been made.

While many members of the trade are aware, in a general way, of the existence of these stations, and have a more or less correct idea of the importance and efficacy of their work, this knowledge is usually quite superficial, and for this reason, and from every consideration, it is desirable that the trade should put themselves in a position to derive all the benefit which these finely equipped institutions are provided and receive the valuable information which their officers are able to impart to them. And it may safely be set down as a fact, not to be gainsaid, if one meets with dealers and other parties who speak disparagingly of the work of these stations, that these parties are crassly ignorant of what these stations stand for. It is an incontestable fact that the decisions at which these officials arrive are the result of scientific investigation with the best of appliances known to experts, which experiments are conducted by men who have been selected on account of special fitness of this work; and it is proper to state, for the credit of the men who carry on the work of the stations, that they are conscientious servants of the public, and in some instances have made discoveries of almost incalculable value, which they have given to the people without seeking to secure rights in their discoveries which would bring to them personally a revenue growing out of the same.

There are sixty stations, one in each state and territory, and in several states two. They are organized under what is known as the Hatch law, a measure, which became a law in 1887, but work had been carried on for several years previous to this in similar lines in some of the states. The national recognition carried with it an appropriation of \$15,000 a year for each station for maintenance, and this amount some of the various states supplemented as the importance of the stations in their bearing became apparent. The return on the investment is quite beyond all ordinary percentages. In a single decade the North Dakota, for instance, is adding to the wealth of that state alone around ten millions of dollars per year, largely by reason of the experimental work of the station in the development of cereals.

DEATH OF JOHN F. HOWARD.

The news was spread upon the Chicago Board of Trade on the morning of October 31 that John F. Howard, one of the most popular mem-



THE LATE JOHN F. HOWARD.

bers of the Board among the cash traders, was taken with pneumonia, and, the day following, the announcement came that he had succumbed to the disease and had died at 11:45 o'clock the previous night.

John F. Howard, or "Jack" Howard, as he was more familiarly known, was born in the little town of Constantine, Mich., on August 15, 1868. His early years were spent in Findlay, Ohio, to which city his parents had moved from Michigan, and previous to engaging in the grain business he was for a number of years in the general offices of the Wabash Railroad and later with the Rock Island Railroad at Chicago. He left the railroad company in 1888 to accept the position of office manager for Lasier, Timberlake & Co., and filled this position creditably until 1894, when he was offered and accepted the place of floor salesman in the Board of Trade for H. Linebarger & Co. One year later he took a position with the Calumet Grain and Elevator Co., and for the past four years had handled his business through a joint account with W. A. Fraser Co.

Jack Howard had made many warm friends during his business career, both on the Board of Trade and in Illinois, where were the majority of his customers. On the first of November, the day of his funeral, the trade in the cash market on the Chicago Board was adjourned at 12:30

out of respect to his memory and a beautiful bank of American Beauty Roses on his sample table, the gift of his friends, spoke of the warm feeling that was felt for him.

The funeral was held at 4 o'clock at the Lexington Hotel at Wabash Avenue and Twenty-second Street, where he made his home, and besides his immediate relatives was attended by upward of 100 of the members of the Board who went in a body. After the Lexington Quartette had sung "Lead, Kindly Light," the Episcopal Church service for the dead was read by the assistant pastor of Grace Church, following which S. H. Greeley of the Chicago Board of Trade delivered a short panegyric over his dead friend.

There were several beautiful floral pieces, one being sent by the "Boys from the Pit," and one by the "Cash" traders. There were very many telegrams expressing sorrow for his death received from Illinois, and especially from Ross-ville, where he had an unusually large number of friends, of whom some were able to attend the funeral.

The honorary pallbearers were Eugene Merritt, James R. Dalton, Jos. P. Griffin, Sid. Warner, Frank A. Maurer and Fred Austin. His remains were taken at 9:30 the same evening for interment at Findlay, Ohio, his old home.

IS IT A REBATE?

The Winnipeg Grain and Produce Exchange, in its effort to maintain its commission rates and to protect all members and patrons against discrimination in rates, has expelled from its membership the Grain Growers' Company, Limited. This company 2,500 Western farmers are shareholders. The company purposes to handle grain for its shareholders on a commission basis of 1 cent a bushel, all profits at the end of the year to be distributed by the ordinary method employed by companies in distributing dividends. For the past year the Exchange has been rigidly enforcing its rules regarding the commission to be charged by members for handling grain for non-members. Many members have been penalized for breach of the rules, but all have heretofore paid the penalty and raised no objections. The regular commission of 1 cent a bushel is charged outsiders, but anything in the nature of a rebate, or tacit understanding to return a part of the commission charge, is absolutely prohibited under the Exchange rules.

The proposal of the Grain Growers' Grain Company to return to its shareholders a portion of the year's profit in the shape of dividends is regarded by the Exchange as in the nature of a rebate. The company say that as an incorporated concern its shareholders are entitled to a share of profits. This is the point which has occasioned the trouble.

The episode develops the fact that the enforcement of the commission rules is not popular among members of the Exchange, many of whom say that elevator interests have a majority in the council and swing things to suit themselves, says a press correspondent. To eliminate track buyers and direct country deliveries to their elevators is alleged to be their objects. Several rules have been passed by the council which would appear actually to prohibit a track buyer's doing business at country points, while the acute car shortage, taken in connection with the record country deliveries, has simply forced the farmers to sell to the elevator people at prices from 6 to 10 cents a bushel less than the market price at Winnipeg.

The Grain Growers' Company, of course, does not go out of business because of its expulsion, but has to employ other methods for disposing of its grain.

The Adams corn farm near Odebolt, Iowa, is said to contain 15,000 acres, all in corn, producing this season 525,000 bushels or 35 bushels per acre.

GAS ENGINE IGNITER TROUBLES.

The essential to a good spark is that a good contact shall be made before the contact points are forced apart.

In practically all make and break igniters the movable electrode passes through an iron or a bronze bushing and the current must pass from this bushing to the axis of this electrode before reaching the contact points, says Gas Power.

Under certain conditions the contact between the outer stem and its bearing, i. e., with the metal of the engine, may be so poor that only a very small current could flow; so that on breaking the contact the spark is too feeble to light the gas.

Oftentimes when this condition exists it can be seen by shielding the igniter mechanism from the light—if the contact between igniter stem and bearing is very poor small sparks may often be noticed around the igniter parts outside of the cylinder.

The cause of this trouble may be due to the presence of too much oil on the igniter bearing; it is, however, more often due to wear and a poor fit between the stem and its bearings; for where the bearing is poor the gases and burnt oil flow through by reason of the high temperature which the stem reaches after a few minutes running; the oil and soot bakes on it, forming with the "fire rust" a coating that is an extremely poor conductor.

Add to the resistance thus offered—that due to the accumulation of fresh or of burnt oil on the contact points proper, inside the cylinder an amount of resistance is easily reached which prevents the passage of enough current to give a satisfactory spark.

Nearly all make and break igniters on commercial engines are defective in design in that they permit of this condition occurring.

The igniter stem bearing is one of, if not the most important bearing on an engine.

It should work freely—be as near free from leakage and free from friction as possible.

When the stem is flooded with oil a good contact is not formed for the current (for oil is a poor conductor and when it completely surrounds the stem the insulation is absolute). Yet when well oiled the igniter works better than when the bearing is dry.

The igniter stem should be kept cool enough not to burn the oil.

Oil should be fed to this bearing in ample quantity and regularly—best perhaps by a special oil cup or by force feed.

The prevention of the loss of this oil and the keeping of the bearing in good condition could be obtained by making a valve shoulder near the outside end of the bearing or by surrounding the outer end with a stuffing box; and lastly a perfect metallic contact should be had—either by soldering a flexible wire direct to the igniter stem—or to copper brush pressed against the stem at its extreme outside end. Where such provision is properly made it will be found that ample spark for all purposes can be furnished with from one-third to one-half the battery power usually found to be necessary.

CORN SPECIAL IN INDIANA.

The Lake Erie & Western R. R.'s seed corn special started from Purdue Experiment Station on November 12, and will be out until the 16th inst. The real work began at Ambia, Tuesday morning, November 13, and during the day worked over to Tipton. On the second day the run was from Tipton to Laporte, and on the third day the train ran from Laporte to Indianapolis. The fourth-day schedule called for a number of stops between Indianapolis and Muncie and Connersville and Rushville, a big meeting being held at Rushville on Friday night. On Saturday the run will be from Rushville to Fort Wayne.

Prof. G. I. Christie, who succeeded in arousing considerable interest in corn culture in Indiana during the last year, was one of the lecturers. The others were Profs. Wiancko and Fisher of the Ex-

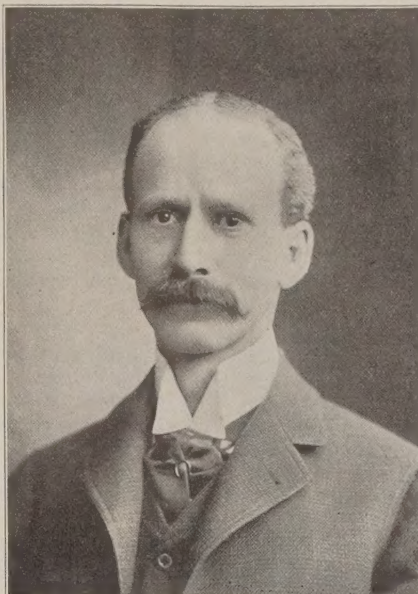
periment Station, D. F. Maish of Frankfort, president of the Indiana Corn Growers' Association, J. P. Davis, the Hamilton County corn expert, C. B. Benjamin of LeRoy, member of the State Board of Agriculture, and Oliver Kline of Huntington. It was their aim to give the corn growers of the territory traversed advanced lessons in corn culture. Particular attention was paid to the topics, the selection and storing of seed corn. The train carried corn for exhibition and a store of helpful literature for distribution.

CLARENCE H. THAYER.

On October 1 the firm of C. H. Thayer & Co. of Chicago was formed to succeed the cash and future and grain and seed business of W. R. Mumford Co.

Mr. Thayer, the head of the new firm, was manager of the Mumford Co. since its organization in the 'eighties, and has been a member of the Board of Trade continuously since then.

In addition to the future business for country



CLARENCE H. THAYER, CHICAGO.

accounts, the new firm will make a specialty of handling wheat, barley and seeds.

The offices of the company are in the Brother Jonathan Building, 2 and 4 Sherman Street.

THE SHAFFER BOYCOTT AT THE RIVER.

The boycott, as Mr. Stream of the South Chicago Elevator Co. calls it, of his firm by the Omaha Grain Exchange, is getting into the local newspapers, and the Council Bluffs Nonpareil says that, "Unless the executive board of the Omaha Grain Exchange loosens the throttling grip that it has chosen to place upon the Council Bluffs elevators, it is likely that a request will be made of the next legislature for an Iowa statute establishing an official board of weighmasters and grain inspectors."

Complaint was made that the Exchange refuses membership not only to J. C. Shaffer & Co. or the South Chicago Elevator Co., but also Droge Bros., as these firms claim, because of the existence of a local boycott of the Rock Island system, over which these firms operate; but on October 30 C. D. Sturtevant, representing J. C. Shaffer & Co., was elected to membership in the Exchange, thus ending the boycott.

However, they have now gotten Senator Saunders of the Bluffs awake, who with the average legislator's acumen, or want of it, sees a "trust" tucked away in the Exchange's offices. He says:

"When one takes into consideration the trouble experienced by a firm trying to transact business

without being able to quote any weights and inspection other than their own, no matter how unquestioned the integrity of that firm is, one feels that an official [state] inspection would not only be of benefit, but is absolutely necessary. There is no doubt in my mind that a statute ordering this would be passed without the slightest trouble, as there would be practically no expense involved, the officials' fees being ample consideration for the office. If such a statute were passed there is no doubt in my mind that other elevators would be established on this side of the river, thereby benefiting the business section of the city. I am heartily in favor of such a measure, and it is more than likely that such a measure will be presented at the coming session of the legislature."

W. H. BOYS, RAILROAD COMMISSIONER.

Governor Deneen of Illinois on October 24 appointed W. H. Boys of Streator to be member of the Illinois Railroad and Warehouse Commission, to fill the vacancy caused by the death of James S. Neville of Bloomington. It is expected that Mr. Boys will be elected chairman and that he and Mr. French will transact the business of the Commission, Col. Isaac T. Ellwood of DeKalb contenting himself with drawing his salary, as usual, without doing any work or carrying any responsibility.

W. H. Boys was born in Marshall County on December 18, 1862. He was educated in the Streator High School and Hedding College in Abingdon. Later he read law in the office of Judge Shaw at Lacon, and was admitted to the bar in 1886, taking up the practice of law at Streator. He has been city attorney and mayor of Streator, and for many years has been a member of the law firm of Reeves & Boys.

Mr. Boys was appointed assistant attorney-general by Attorney-General Stead and served in that capacity for one year, when he tendered his resignation in order that he might give more attention to his law practice. At the request of the Governor he has been acting for several months as special counsel in the investigation of the accounts of the Illinois Central Railroad with reference to the latter's payments to the state under the 7 per cent provision of the road's charter.

A NUT FOR THE MISSOURI COMMISSION.

R. J. House, proprietor of the Dixie Elevator at Kansas City, has propounded a conundrum to the Missouri Railroad Commission, which that body has passed up to the Attorney-General of the state.

Mr. House, in substance, says that owing to the way in which the elevator of the C. M. & St. P. Ry. Co. is operated by its lessees, it is ruining his, House's, business, his elevator standing idle because it is unable to compete with the Milwaukee Elevator. He, therefore, asks the question: Has the Milwaukee Elevator the right under the laws of Missouri to so conduct its business?

The Railway Company by its counsel contends that the question involved is a matter of law and beyond the jurisdiction of the Commissioners. Mr. House had no attorney and demanded to know how he should proceed to get a hearing of his grievances before the proper authorities.

"We will submit the case to the attorney-general," the Commissioners told him, "and if he says we have the right, we will go into the case. If it is not a question for us to decide, you will have to have quo warranto proceedings brought by the Attorney-General. In the meantime, employ a good lawyer to present your contention in the proper form."

New corn began to arrive at Peoria in some quantity as early as October 20. There was a demand for all coming; the local industries wanted it, and as soon as the receipts warranted they substituted the new in place of the old.

[Written for the American Elevator and Grain Trade.]

SOLILOQUY OF A COUNTRY ELEVATOR MAN—THE CAR SITUATION.

BY F. S. RUTHERFORD.

It's the hardest proposition we corn shippers ever had,
With supply of cars uncertain, growing worse,
and now so bad;
There is danger in contracting to deliver on the track
For certain time of shipment—it may put us on the rack.
If we sell ten thousand bushels to be shipped in thirty days,
It's an undetermined question whether't loss or profit pays.
If the cars cannot be furnished to load out the corn on time,
We'll be surely up against it, without profit of a dime.
If the market price is lower when the shipping time expires,
We will likely be receiving some most unwelcome "wires,"
Advising us right curtly that our sale of such a date
Is canceled there instanter, 'cause with shipping we are late.
When the time to fill our contract has gone by a single day,
If the market has gone upward, there's a difference to pay;
For the man who made the purchase, 'cause we couldn't ship the corn,
Will call for double profit, and we'll pay it, though forlorn.
When the cars are very plenty it may work to sell on track,
But otherwise the shipper will find him on the rack;
He had better trust consigning, selling when the grain arrives,
And hedge by option selling—it's a plan that ever thrives.
St. Louis, Nov. 8, 1906.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

CARS IN IOWA.

Editor American Elevator and Grain Trade:—The attached copy of letter from Superintendent Brown of the North-Western Road explains itself. We have asked the Commission to cause an immediate withdrawal of the restrictions therein contained and will advise you the outcome later.

Yours truly, G. S. LOFTUS.

Honorable Railroad Commissioners, State of Iowa, Des Moines, Iowa.—Dear Sirs:—Your letter of recent date at hand on the subject of furnishing 80,000 capacity grain cars for hay at Ledyard, Iowa. I wish to advise that our grain shipments in Iowa are very heavy at this time of the year. We have a series of new 80,000 capacity box cars, which have been assigned to the grain trade, and I think you will agree with me that it is unreasonable to use these cars for hay shipments, on account of inability to load them to anywhere near capacity. We need grain cars just as badly as we need hay cars. These 80,000 capacity cars are taking the place of the older class of cars, which are being diverted to the use of hay, straw, potatoes, and other commodities, where they can be utilized to good advantage; and, I, therefore, feel that we are justified in using this class of cars for grain and the others for hay.

I have been able to secure fifteen hay cars for

Ledyard and locality in the last few days, the majority of them being cars which have been taken out of the grain service and assigned to hay and shipments other than grain. This, I think, will relieve the station at Ledyard and give us a start. After that, I think we will be able to keep them supplied with a reasonable number of cars in the future to take care of the shipments.

Yours truly, S. H. BROWN, Supt.
Eagle Grove, Iowa, October 20.

NO CALL AT MINNEAPOLIS.

Editor American Elevator and Grain Trade:—Replying to your letter of October 19, would say the Minneapolis Chamber of Commerce Rules contain no provision whatever with regard to the fixing of prices to govern track bids made by our members. Our official closing prices are published for the purpose only of advising the trade the values of certain grain on this market, as determined by the day's trading. You can readily understand that shippers and buyers desire to have some official information on this subject. This exchange has never adopted any rule which corresponds to the "Call Board" as in vogue in Chicago.

Yours very truly, L. T. JAMME, Secy.
Minneapolis, Minn.

SUCTION FANS FOR CLEANING GRAIN.

Editor American Elevator and Grain Trade:—Have you ever printed an article on suction fans for cleaning grain at the elevator head? If not, I would like to have you advise me whether the scheme is practical and the best method of attaching fan to head; also what work a fan would do, and whether it would clean the grain enough to pay for putting it in.

Yours truly, C. A. P.

Answer.—If the writer has enough room for a cleaner, it is the proper thing to put in, as a machine will pay for itself in a year's time. If he has not enough room a fan would be the next best thing. We are informed, however, that a fan would remove only a part of the dust, for if enough air were put on to remove all of it, some of the grain also would be carried away.

If any of our readers are using a fan successfully at the elevator head, we should be pleased to have their experience with it.

W. W. GRANGER VINDICATED.

Editor American Elevator and Grain Trade:—The Union Grain and Hay Company and Mr. W. W. Granger, manager of said concern, stand vindicated of a charge that was brought against them regarding the handling of a car of oats. It all came about over a carload of oats which was sold to the Early & Daniel Co. by the Armour Grain Co. of Chicago. The Armour Grain Co. had sold a carload of oats on specified time shipment, but it is said it had overrun its time limit, which caused the Early & Daniel people to refuse acceptance of said car. The Armour people then turned over the car to the Union Grain and Hay Co. to be handled practically as a consignment. The Union Grain and Hay Co. fulfilled its mission and said car was sold to the Queen City Grain Co. on Chicago weights.

Now, it so happened that the Union Grain and Hay Co. had sold a carload of oats (back in May) to a city contractor. They bought some oats on 'Change to fill this sale to said contractor, and by coincidence bought back the next day the Armour car of oats from the Queen City Grain Co. This car when unloaded was found to contain some ten thousand (10,000) pounds more than the official Chicago weights showed, which started the trouble.

Now, this world is full of jealous mortals who are ever ready to cry out against parties who happen to make a success in life. Mr. Granger, manager of the Union Grain and Hay Co., has built up this business until it stands in the front rank for honesty and square dealing. Before the case was brought up for trial Mr. Granger was subjected to, as well as persecuted by, rumors

that were due to enmity as well as jealousy. He was acquitted by the investigating committee of the Cincinnati Chamber of Commerce, and when the verdict of "not guilty" was given out on 'Change the air was rent with enthusiasm by the loud hurrahs for Mr. Granger.

The many shippers and friends of Mr. Granger throughout the country will be glad to hear that the Union Grain & Hay Company stands now, as it always has, namely, that of a square deal.

Yours truly, HARRY W. KRESS.
Cincinnati, O.

INTO THE GRAIN BUSINESS AGAIN.

Editor American Elevator and Grain Trade:—I commenced to handle grain here in 1880. My elevator was burned eight years ago and since that time I have been merchandising. I have never been satisfied in that business, however, so have recently built a new elevator on the site of the one that was burned. I have put in Western Sheller and Cleaner and will soon be ready to help handle one of the largest corn crops that Kansas ever produced.

Kaffir corn is being cut and will be on the market in the next ten days. This is largely used now by mills. I suppose it is mixed and ground for flour [feed?]; suppose now under our pure food laws we will see it marked on sacks, providing it was mixed. It sells for about two or three cents less than corn.

Hoping to again get in touch with the grain interest, I remain,

Yours, J. C. HAINES,
Augusta, Kan. Of J. C. Haines & Co.

VALUE OF ASSOCIATION DISCUSSION.

Editor American Elevator and Grain Trade:—I am receiving numerous congratulations from our dealers all over the state, complimenting us on the result of our fall meeting in relation to the discussion on new corn. The sentiment created by this discussion had the effect of delaying the movement of new corn with all of our dealers until such time as it will be considered fit for shipment. Had it not been for the sentiment created at the meeting, practically all of our corn people would have thrown down the bars and filled up their storage with corn unfit for shipment. As the matter now stands, they now have their storage for corn practically empty, ready for filling up with corn when in a condition for shipment that will enable them to handle it in a satisfactory manner, without incurring the risk of heating, either in transit or in storage.

One member, in writing to me on the subject, says that the influence of that discussion on him was such that it has saved him more than one hundred times his annual dues.

Yours respectfully, J. W. McCORD, Secretary.
Columbus, Ohio.

THE ILLINOIS GRAIN DEALERS' ASSOCIATION.

Editor American Elevator and Grain Trade:—A committee appointed by the board of directors of the Illinois Grain Dealers' Association, consisting of President E. M. Wayne of Delavan, Director J. L. Brainerd of Springfield, and the writer, to select a meeting place for the fourteenth annual convention of the Association, met on Thursday, October 25, in Chicago. Invitations had been received from the cities of Bloomington, Chicago and Springfield. After considering the proposition generally, and the claims of each city as set forth in the invitations, it was decided to hold the convention in Chicago, at the Auditorium Hotel. The committee secured rooms for headquarters, and the convention will meet in the Auditorium Hall on the sixth floor.

The members of the Chicago Board of Trade assured the committee that they would render every assistance possible to make the meeting a success. The officers of the Association extend a very cordial invitation to all grain dealers in the state of Illinois and elsewhere generally to be present. They also most cordially request them to bring

their wives and sweethearts to the meeting. The Auditorium Hotel has made a rate for those attending the convention, which can be secured on application. The usual rates extended by the railroads will be secured. A committee of Chicago ladies will look after the welfare and entertainment of visiting ladies.

Very truly yours, S. W. STRONG,
Pontiac, Ill. Secretary.

GRAIN STANDARDIZATION.

Editor American Elevator and Grain Trade:—The grain trade press and the trade of the country is, no doubt, more or less interested in, and entitled to a word or two in explanation of, the functions to be performed by the office to which I have recently been appointed in the Bureau of Plant Industry, United States Department of Agriculture, because of the generous support given me during my service as chief grain inspector at Buffalo and in my several attempts to better conditions in the matter of the inspection and grading of grain in this country.

The history of the movement of United States standard grain grades, as well as for national or government grain inspection—which, by the way, are two widely different propositions—began several years ago, when complaints were made to our foreign consuls of the quality and condition of American grain arriving in foreign ports, upon which the foreign buyers lost heavily. These shipments were all covered by certificates of inspection marked "official," which at once conveyed to the mind of the receiver the conviction that these certificates were issued by the national government, or at least sanctioned by it; hence his complaints to our representatives abroad, particularly in view of the fact that our government was inspecting the meats entering into foreign commerce.

These complaints became more and more frequent and persistent, until finally Congress ordered an investigation by the Department of Agriculture. It was given into the charge of the Bureau of Plant Industry. This investigation brought forth a mass of evidence and information, pro and con, that has duly impressed the authorities of the department with the seriousness and importance of the question, and realizing that their viewpoint was purely a scientific one and in order to obtain and have the practical view presented and represented and that the honest interests and requirements of the grain trade and agriculture might be conserved, the department has enlisted my services to assist in sifting the information and evidence and drawing a sane conclusion therefrom.

It has been determined that it is best to go slow in the matter and to consider the many points to the question step by step, and with this end in view there have been established in Baltimore and New Orleans two grain testing laboratories for the purpose, principally, of testing and determining a few of the principal and simple factors that go to make up the commercial grades of corn, although the work is not by any means to be thus limited. The people in the grain trade at these two points (to their credit be it said) have extended to this department a cordial invitation to establish these laboratories in their markets, and have unhesitatingly promised their unqualified support and cooperation in the work.

A like laboratory is to be established in London, England, and placed in charge of a representative of this bureau, who from this point will examine, as far as possible, shipments from this country on arrival on the other side.

In this way the department expects, during the coming season, to determine under given conditions what corn is safe for shipment and what is not. If this can be done, a long step in advance will have been taken toward an intelligent grading of corn for export. As the appropriation for this work is small this year, but two such laboratories could be established at our sea ports, but it is hoped that next year, with the cooperation

of the trade, the work can be extended to the larger interior grain centers.

The investigation of the question, up to this time, has resulted in the development of an apparatus for testing the moisture content of grain, which, in my judgment, is entirely practicable for use in the larger inspection departments, and which I hope to be able to show you on my next visit to your city. This apparatus is so fitted that one man will be able to handle and ascertain the moisture content of about 75 samples in seven and one-half hours, and will be part of the equipment of the grain testing laboratories, together with such other apparatus as will be necessary, as I said before, to ascertain the simple and important factors of the existing grades, in order that when these are determined the requirements of the commercial grain grades can be correlated and stated in definite terms, so that as far as possible differences in judgment and disputes may be settled by a mechanical process.

The moisture testing apparatus, I am sure, will

NEW ELEVATOR AT LATHAM, ILL.

After waiting two months for a lease, Kautz & Maus of Latham, Ill., let their contract for the erection and completion of a modern, up-to-date grain elevator, to be located at Latham. The contract was let September 19, 1906, with the understanding that the elevator was to be completed by the 25th of October. On October 29, 3,000 bushels of grain were received, making a total of thirty-five working days from date of contract to date of completion.

The elevator is 30x30 feet on the ground, 40 feet high to the top of bins, and is surmounted by a cupola 14x16 feet by 15 feet high. The power house and the foundation of elevator are of concrete. The bins are cribbed with 2x6's and 2x4's, hemlock.

The equipment is as follows: There are two elevator legs, one having 14x6-inch cups and the other 10x5½-inch cups. In the basement there



KAUTZ & MAUS' ELEVATOR AT LATHAM, ILL.

alone be of great use to the shipper of corn, as well as to the miller of the same, and to me these laboratories have a great future, their possibilities being almost unlimited. One such laboratory will be equipped in my office and I will be at all times very glad to furnish analyses of samples sent me by the trade. Such samples should contain at least one quart of grain and should be packed and sent in air-tight receptacles, preferably in glass fruit jars with rubber gaskets, and addressed United States Department of Agriculture, Grain Standardization, Washington, D. C.

Very much hoping that through your valuable paper I may be able to be of use to the grain trade, as well as the United States Department of Agriculture, I beg to remain,

Yours very truly, JOHN D. SHANAHAN,
October 23, 1906. Expert in Charge.

is a steel boot tank to protect the boots from water. These elevators are fitted with Burrell Distributors and Steel Spouting. There is a Constant Suction Fan located in the cupola to take care of the dust from the elevator heads. There is a 500-bushel Fairbanks Hopper Scale located on the working floor of elevator, with a shipping bin of 2,000 bushels' capacity above it.

The exterior of elevator is covered with galvanized standing-seam roofing, furnished by the Lloyd Iron Roofing Co. of Chicago.

This elevator was designed and constructed by the Burrell Engineering & Construction Company of Chicago, who make a specialty of this class of work.

Send us the grain news from your neighborhood.

THE GRAIN TRADE ENQUIRY.

Chicago, Kansas City, Omaha and Des Moines have in turn experienced during the past thirty days the sensation of a visit from Messrs. Prouty, Lane and Clark of the Commerce Commission, acting as inquisitors into the conduct of the grain trade of the West. The word "sensation" is used advisedly; because the reports of the Commission's proceedings in Chicago, and presumably in the other cities also, as printed by the daily papers, have been shamefully grabbed, as is the habit of the daily newspapers, and convey an impression of the testimony taken, which, while not untruthful as far as absolute statement went, was in fact sensational in character, because manipulated for that purpose, and in fact was untruthful and unfair to a degree.

John H. Marble, the Commission's special attorney for this particular work (an inquiry into the conduct of the grain business as directed by the La Follette senate resolution), would probably deny any attempt at sensationalism; but he opened his testimony at Chicago with one A. L. Aygarn of Pontiac, Ill., who sufficed Judge Bathea's court room, where the Commission sat, with tears as he rehearsed the moving tale of his wrongs. Mr. Aygarn said that at one time he was a member of the Illinois Grain Dealers' Association, but "in order to help out a friend I incurred the displeasure of its officers," after which he "found it hard to get cars." Mr. Aygarn was a scooper; but in 1901 was accepted as a member of the Association, continuing to buy as a scooper at several stations, and overbidding all competitors. Then, he said, in substance, that the roads stopped supplying him with cars and commission houses declined his consignments.

He was followed by H. H. Carr, W. M. Stickney and E. G. Dunn, representatives of the houses who are specially engaged in the work of promoting farmers' elevator companies in Illinois and Iowa in order to get their shipments. They testified that the farmers' houses raised prices where they operated from 3 cents to 6 cents per bushel. Mr. Carr said, so the press reported, that the associations had practically "busted" his business (a statement he subsequently modified to "injured") by making it difficult for farmers who had formerly shipped to him to get cars.

J. A. McCreery of Mason City, Ill., a farmers' company manager, thought that the railways do discriminate against the farmers; at least, they passed on the question whether more elevators are needed at given stations, but he could recall positively no instance where a site had been refused. He said he knew of cases where commission houses had discouraged consignments from farmers' elevators, and that the latter are, in fact, shut out of certain markets where the commission houses refuse to handle farmers' companies' stuff. Chicago commission men do not discriminate in their charges; but he thought farmers' elevators' grain does not bring quite as much as that of regular dealers. Some line companies won't bid the farmers, and those that do won't bid them as much as they do the regulars.

John Ross of Easton, Ill., manager of a farmers' concern, also complained of having once been shut out of one certain Southern market; and he handed in a lot of letters from commission houses there explaining why. The railroads treated his company all right.

THE SHAFFER-ROCK ISLAND DEAL.

The remainder of October 15 was devoted to an inquiry into Mr. J. C. Shaffer's deal, by which the old Counselman Elevators in South Chicago were bought by him for \$700,000 and sold to the Rock Island for \$1,000,000; and also into the contract of the Rock Island Railway Company to lease the houses, rent free, to the South Chicago Elevator Company until the houses shall be paid for, the Elevator Company guaranteeing meantime to bring to Chicago over the Rock Island road 5,000,000 bushels of grain annually or forfeit to that Com-

pany 1 cent per bushel for the entire amount the Company so fails to bring in. This deal looked bad to the Commission; but President Winchell of the Rock Island next day swore that the purchase was made because it was advantageous to the Rock Island system and was made on the best terms that could be made. Mr. Shaffer having obtained control of the property from the Counselman estate, the Rock Island could get the property only on Shaffer's terms. The contract of sale enables the Rock Island to pay for the property in installments. The traffic arrangement was made for the same purpose—to get tonnage and to force the lessee to ship grain or pay a penalty for the failure to do so.

J. Rosenbaum of the J. Rosenbaum Grain Company told a similar story of the building of the Rock Island Elevator at Kansas City—he put up the cash, which the Rock Island is repaying by installments. The Grain Company leased the house for ten years and paid rent for its use as long as the Rock Island furnished cars as per its contract. At present the Company pays no rent; but it gets no elevation allowance, and will not unless the Commerce Commission sanctions its payment.

Mr. Rosenbaum was very emphatic in his statement that his Company belongs to no association of grain men and that it is not permitted to enter into any agreement with other grain men to fix prices. The Company buys of anyone who has grain to sell except scoop shovel men—they are not reliable, as a rule. He said, furthermore, that the penalty clause in farmers' elevator company rules acts as a restraint on trade. Indeed, he declared quite forcefully that farmers are more closely allied with each other and discriminate in trading against others than farmers far more than they themselves are discriminated against.

E. F. Rosenbaum of the same Company declared that private elevators are necessary to bring grain into Chicago. It is not profitable to put grain into public elevators, and it is impossible for a man to run a public elevator without being also a grain dealer. If all the elevators were public, they would stand empty. Bids for grain to the country are based on the bidder's needs at the time the bids are made.

THE CALL TO ARRIVE.

On the second day, October 16, Richard Gambrill, a Chicago broker, was put on the stand. Like Mr. Shaffer the day before, Mr. Gambrill began his testimony with an attack on John Hill Jr., who was acting as adviser or prompter of Mr. Marble during certain features of the examinations, and who also himself examined certain witnesses. The Commission replied to the attacks of both gentlemen that if the witnesses objected to Mr. Hill's interrogations put as a private citizen, the Commission could regularly constitute him its officer by appointment then and there. The objections ceased.

Mr. Gambrill then devoted his attention to the action of the rule establishing a "call to arrive." "As long as you are looking for the facts and are assisted by John Hill Jr., I wish to make a statement," he said. "A rule is in existence on the Board of Trade here which prohibits me from doing business in the country. It places Chicago in the position of a country village. A call is posted in the Board each afternoon and I cannot go into the country and bid. Since that rule was adopted I have not bid in the country. That, to my mind, is as detrimental to trade as anything I know. It seems to me that your august body, assisted by the gentleman for whom I have the highest regard, should get both sides. That rule is in restraint of trade and a violation of the law. It is not fair, is an unjust proposition and is in restraint of trade."

Mr. Gambrill's testimony was typical of that of all the elevator men who were called upon to testify on that question. "It is killing the market."

"Why don't you go to the call and bid what you want to bid?" asked Commissioner Lane.

"Oh, I don't care to 'show my hand.' I'd be

foolish to go on 'change and do that by a little bid."

Mr. Gambrill thought the call enabled Toledo and the East to overbid Chicago in territory west of the river; but to Mr. Hill he said that before the call went into effect he did not bid higher than the market, and that the rule does not prevent his bidding any price he chooses for grain to go elsewhere than to Chicago.

Sam. Phinney said the action of the call is a matter of doubt; that it was adopted by the votes of the commission men, who were being crowded out of the market by the "big men" who did the bidding.

THE ELEVATOR POOL—NOW NON-EXISTENT.

James Pettit of the Peavey Grain Co. told the history of the agreement made several years ago by the public elevator men in Chicago not to take storage grain from each other. One object, he said, of this agreement was, by making charges uniform, to prevent the extension of favors to certain dealers in order to get storage as public elevator men. The earnings were pooled and divided among the houses in proportion to the amount of the business of each. The agreement was cancelled twice, the last time recently because it was considered illegal under the new rate law.

INSPECTION METHODS.

Mr. Pettit was examined at length in regard to the elevator system and its operation. In substance, his theory is that the private elevator and the on-track bidding system is necessary in order to bring grain to Chicago that would otherwise go to other markets. The public elevators are operated to earn the carrying charges, but grain must be forced into them from the private houses, as explained later. He also explained the operation of the inspection system, and the cash value of the "spread" of a given grade—in the higher grades from 1 cent to 1½ cents per bushel when sold by sample. On the lower grades the spread may be as great as 10 cents. The grade out is the lowest quality allowed in the grade. He thought the objection of the miller to taking contract wheat is not so much its grade quality as it is his desire to get a wheat that is suited to the kind of flour he is making. The inspector pays no attention to "strength" in grading wheat. The tendency of inspection is to be low, but high when the grain is going into store; so that grain in store is the highest run of that grade. He said he believed Chicago inspection in and out is now as uniform as it is humanly possible to make it.

FORCING GRAIN INTO PUBLIC ELEVATORS.

A great deal of time was devoted to the method in vogue in Chicago of "forcing grain into the public elevators," as the elevator men put it; or of evading the law that forbids a private elevator man from handling his own grain in a public elevator, as Mr. Hill contends.

A. V. Booth was the first witness. He said as a broker he bought grain of the elevator men to go to store, at such a price under the option as would net him over and above carrying charges and interest on his advances, one-eighth of a cent on the near future and one-quarter to one-half of a cent for the distant deliveries. He would then sell a future for the same amount to the elevator company of whom he bought. This would keep the grain in store, and the elevator earns the charges for the period represented by the future sold on it. The sure profit in this kind of business is about 6 per cent on the capital the broker can command.

"Suppose," asked Mr. Hill, "cash grain should go to a premium, would you sell out your cash and buy a future as a hedge to your future sale?" Mr. Booth said he would not—"wouldn't consider it good business." He said he felt himself to be the owner absolutely of the grain he had bought; but while he did not say so in terms, it was understood by his expression of "not good business policy" that if he did sell out in the way Mr. Hill suggested, he would not have any further opportunities of making a sure one-eighth of a cent a bushel on that kind of deals thereafter. Holding

the grain for the term represented by the future sold by the favored broker at the time the trade is made is considered a question of good faith.

Messrs. Woodbury, Jackson, McDougall and Wetmore testified to the same effect. Indeed, Mr. Wetmore told of his own experience that on one occasion he could have made a big sum on oats carried for Counselman by selling the cash; but Counselman refused to allow him to do it, but marketed the stuff himself and pocketed the profit. The elevator men asked about this method of "forcing" said the brokers owned the grain absolutely, and that they had the moral and legal right to do with the grain as they saw fit, even to the extent of selling it out if the cash should go to a premium. But it appears none of the brokers thought the same way; for, although they also did insist they owned the grain and had the legal right to dispose of it in their own way, they did not appear to think they had the moral right to violate at least an implied agreement not to sell if cash goes to a premium before the option matures.

MORE FARMERS' TROUBLES.

Lee Kincaid of Athens, president of the Farmers' Grain Dealers' Association of Illinois, entertained the second day's session. He said the penalty clause is not enforced by Illinois farmers' companies except in two cases, one of these being at Monticello. There are about 150 farmers' elevators in the state. They have no trouble in getting a market. Nearly all commission men take their shipments and there is no boycott of the commission men for doing it. Mr. Kincaid made the specific charge, however, that Milo Leach of Springfield, a farmers' elevator operator, received a letter from Bartlett, Frazier & Carrington of Chicago last June in which he was told that if he did not cease overbidding that firm in the purchase of grain the firm would "ruin" him by advancing the price beyond his reach. This charge Mr. Bartlett the next day denied absolutely—said there is not a word of truth in it, and added that the firm's relations with Leach are friendly, the latter having sold grain to this firm only very recently. Mr. Kincaid also said: "The B. & O. Southwest has discriminated against us in furnishing cars, and also in the matter of freight rates. We found out a short time ago that it was giving the regular elevator man at Farmingdale, Edwin Beggs, a 6-cent rate to St. Louis, while it was charging the farmers' elevator 8 cents. The fact was given away by a substitute agent, who came to take the place of the regular agent while he was sick. We later found that the farmers' elevators at Pleasant Plains and Ashland were discriminated against in the same way. We have laid the facts before the attorney-general of Illinois, and expect to bring suit against the road for \$5,000 damages."

Mr. Marcy of the Armour interests, questioned on his method of bidding, said bids are made without any reference whatever to bids by other buyers. He bids to get what he wants and to make 1 to 1½ cents profit. A combination is not possible now, as farmers know the prices as well as anyone. His company never attacks competitors, but it never bids or buys from scoopers unless they are known to be solvent and trustworthy men, able to protect their sales and to meet overdriffs. Competition is very close.

ASSOCIATIONS DEFENDED.

Capt. I. P. Rumsey was the only man who during the three days' inquisition acknowledged frankly and proudly his membership in the associations, the Illinois, Iowa and National bodies; and he defended their operations as beneficial to the trade and to the farmers as grain producers and sellers. Grain dealers are honorable men and are not robbers; nor are they extortionate in their exactions of profit, which is no greater than the necessities of the business require, counting the capital invested and the losses that all dealers inevitably sustain. He said he had been in the commission business in Chicago for fifty years, and had always encouraged associations as wholesome factors of the grain business. As for himself, he had never re-

fused to handle any grain consigned to him, but he did not encourage the shipment of grain by farmers themselves for a variety of obvious reasons.

AGAINST THE CALL TO ARRIVE.

W. H. Bartlett was very positive that the call to arrive is injurious to trade. "It is good for the commission man, but injurious to the man in the country, because the rule fixes a price which we may not overbid." Asked why he did not bid on the call what he wanted to bid the country, he said he "might get too much grain." Asked if the call had prevented so far his bidding as much as he wanted to bid, he said it had not, but that it might do so. He thought also a combination of brokers might fix the call bids. Mr. Bartlett said his company never entered into combinations with anyone to fix the amount of his or their bids. He buys of anyone who wants to sell grain, who is responsible, and would bid any responsible seller of grain, but the man who operates an elevator should be favored over the scooper, without, however, going so far as to boycott the scooper. The call to arrive system has not, up to this time, worked to the detriment of the trade of Chicago, but the principle is bad and will work detrimentally in the future.

James Bradley of the Nye & Jenks Grain Company, operating through the Rialto Elevator, controlled by the Nye-Jenks-Schneider-Fowler interests, objected to the call, but does business in spite of it. He thought Chicago only needs a square deal to sustain itself as a grain market. He had heard that the call rule has diverted grain from this market.

DEFENDS THE RULE.

H. D. Wetmore favored the call because it means an open market to bid in for any amount of grain a man wants to buy, and a man can send out his bids as soon as the call closes, without waiting to get a line on the other fellows by waiting until night. The call covers every possible condition and variation of the basis on which a buyer may wish to make a bid for grain. During the day before the call opens anyone may bid the country any price he sees fit to offer, but at the close of the call that right ceases until the opening of 'change next day. The purpose of the rule is to equalize conditions between commission men and the elevator interests. Under the old arrangement, the elevator men might overbid the market during the night, and they have repeatedly bid more on their cards than they would bid on the floor, a practice that operates to beat the market price down and to keep it down. Under the rule the commission man can get more business in consigned grain than he could without the rule, because the country shipper would not consign grain to a market that paid less for it on 'change than bidders would offer. Since the establishment of the call prices have been better and conditions were satisfactory all around.

Mr. Wetmore did not agree with Mr. Pettit that the grain going to store is the best average of the grade, but rather the skin, or bottom, of the grade. The only object in running a private elevator is to mix grain; and public elevator grain sells for less than contract grain in a car by half a cent. He was not hopeful of the outlook for a public elevator unattached to a private house, as the amount of grain going directly from the shippers to store is too small to amount to anything.

W. S. Warren said conditions in Chicago are reducing the number of buyers and shippers of grain, who are not as numerous by 15 to 20 per cent as they were twenty years ago, although the rate of decrease has been less since the July decision. The fact that public elevator men also deal in grain tends to concentrate the business in a few hands, as they get the advantage of the first storage, which, he thought, they used in part to control the grain when bidding for it in the country. Their operations also drive the public away from the public elevators, since the elevator men buy the public elevator grain against the public buyers on 'change. Buying cash grain to

carry in store is, therefore, not profitable to the public, because the difference in prices is not, as a rule, sufficient to pay the carrying charges and yield a profit. The "public elevators" are not those contemplated by the state law, and he thought the public elevator men, by their system of "forcing grain into store," are evading the law. Their storage charges are reasonable enough, except for the first three-quarters of a cent for the first storage period, which should not be over three-eighths of a cent.

Mr. Warren thought a true public elevator could be operated at a profit in Chicago, but the ideal way would be for the railroads to operate the elevators and give free storage to grain for a certain number of days, as they do to other commodities.

THE COMMISSION AT KANSAS CITY.

The enquiry was continued at Kansas City on Monday, October 22, by Commissioners Lane and Clark. We shall not here attempt even to outline satisfactorily the testimony taken, owing to the immense length of the record. Some features culled from the mass reported by the daily press must suffice.

N. P. Simonds of the Simonds-Shields Grain Company was the first witness called, from whom it was elicited that his company has a cinch on the business over the C., M. & St. P. road. Mr. Shields of the Grain Company is the grain agent of the railroad in question. The Grain Company leases the Railroad Company's tile tanks, paying \$200 a month, the Milwaukee Elevator, to which the tanks are attached, handling, clipping and cleaning the grain free of charge and paying all the cost of doing it, as well as absorbing the \$10 charge for switching cars to and from other roads. Mr. Shields gets \$250 a month from the Railroad Company, and he gives all the orders at the elevator about handling the grain and the cars. Needless to say, the Grain Company usually gets the first and all the cars it needs.

George B. French, general agent of the C., M. & St. P., said: "We hired Shields because we suddenly had an elevator thrown on our hands and did not know how to run it. I am sorry now we have it, on account of this unpleasant time it is causing us." Mr. French wished the Railroad Company were out of the elevator business, and perhaps others did, too.

Mr. Shields, who had gone to Chicago on the first day to "load some boats," managed to get that affair closed up in time to return home, on the Commission's request, to testify on the second day. His testimony did not, however, relate to this trip, but to another one taken "last fall" and last summer, when he obtained inside information that gave him a whole month in advance of the general trade to get control of three and one-half million bushels of corn to go out under a special rate, a million of which he bought before even the favored half-dozen others knew a new and lower rate would be made. On another occasion he had a similar "cinch" on 700,000 bushels of wheat, and the Grain Company had "no trouble to get cars either time."

J. S. Adsit, superintendent of the Milwaukee terminals at Kansas City, said that after Mr. Shields became manager of the Milwaukee Elevator, an order was issued that shippers ordering grain sent over the Milwaukee road must notify the Simonds-Shields Grain Company of the car numbers and weight or the cars would not be moved. This order is now in effect, except that it goes to Mr. Shields in care of the Simonds-Shields Grain Company. Mr. Adsit could not see why any of his road's shippers, competitors of the Simonds-Shields Company, should object to this gift of information to the latter Company!

Mr. Shields swore that "no part of the profits of the Simonds-Shields Grain Company is paid to any railroad officer or employee." He does not consider himself a railroad employee, he said. The reason for cancelling the old contract by which his Company managed the Milwaukee Elevator was the fear of the Company that the old contract

was a violation of the new law enacted by Congress. "The new arrangement," he said, "is that I am to be the elevator agent of the Railroad Company. The Grain Company leases the tile tanks from the Railroad Company, but they are separate contracts."

Mr. Shields said the other railroads have agents, most of whom have higher salaries than himself. The Santa Fe, he said, pays Mr. Boynton \$6,000 a year as elevator agent, and he has an assistant who is in the grain business. Mr. Neal, elevator agent for the Burlington, has \$5,000 a year salary. Mr. Shields' own salary of \$3,000 a year he considered too small. Yet Mr. Shields had difficulty in showing the Commission what he did for this \$3,000—for the railroad, that is to say, seeing that all he appears to do is to manage the railroad's affairs in the interest of his own Grain Company, which company handles 90 to 95 per cent of the grain hauled by the Milwaukee road out of Kansas City and puts into possession of the Shields interests all the information of its competitors' operations, and gives it also the benefit of free cleaning, advance notices of changes in rates, etc. Mr. Shields also travels now on an employee's pass, he said.

HUNDRED-POUND GRAB.

Incidentally, J. W. Radford, chief grain inspector of Kansas, in reply to the query, "Is the sweeping loss of 100 pounds per car a just charge?" said: "Different men have different opinions about this. I do not think it is justifiable. The shipper does not get his country weight. He does not get paid for any wheat that does not get into the elevator. Then he is docked 100 pounds for grain that could not be spilled outside. Of course, there is some little grain spilled outside, but, as I have explained this is never weighed to his account. Anyhow, it is picked up by the elevator people, otherwise it would accumulate and stop work. I should think it is not worth more than it costs to pick it up, but that 100 pounds deduction has nothing to do with it and, in my opinion, is not justifiable."

When asked about the Missouri inspection, he said that there were differences constantly arising because of the difference in the two states' rules; and when asked if he did not think one general inspection, under federal direction, would be better than conflicting inspection boards, he said he thought federal inspection would be an improvement.

Apropos bidding, the manager of the Midland Elevator Company said there are no agreements now as to prices or division of the grain with other operators. He would not buy of a scooper. "I'll go up to the limit of where I can get even to drive him out of business. The scoop shoveler is a demoralizer, here to-day and gone to-morrow. He has no investment and we drive him out where we can. We raise the price of grain on him to get rid of him. We ordinarily buy on a margin to make two and one-half cents a bushel. I don't try to drive out farmers' elevators that way. There are two reasons for that. One is I have nothing against the farmers' elevator man; the other is that if I drive him out there will be another take his place before long. The first year's effect of a farmers' elevator in a town is to kill all margin of profit on the grain. It takes a year for the farmer to learn that the difference is not all profit."

It appeared from the testimony of several parties that no formal attempt to agree on bids has been made for over a year. Up to some time ago receivers had been requested from Kansas and Nebraska not to handle grain from any but regular houses, but not since. Some buyers testified that the railroads in Kansas discriminate in the matter of elevator sites in favor of their own line companies.

B. R. Beall, manager of the National Grain and Elevator Company, the "cash grain" dummy for the National Board of Trade, one of the biggest and most arrogant public gambling institutions in this country, was called, and testified "that farmers

who dealt with the National Board of Trade and its members were blacklisted by the Kansas City Board of Trade; and that the rules of the Kansas City Board of Trade provided that any member of that organization dealing with members of the National Board of Trade should be liable to suspension from the former"—as if this were not the most reputable fact in reference to the Kansas City market that the enquiry developed! Mr. Beall claimed that his elevator had handled "half a million bushels," "probably," but could not sell it in Kansas City owing to these restrictions. He claimed that he found difficulty in shipping grain out, and that the railroads charged him higher rates, and other elevators stole his grain at the rate of 1,000 to 2,000 pounds per car. Mr. Beall also knew of combinations to fix prices—in 1904—to which he had been a party—"for one day only." Mr. Beall "doth protest too much."

C. M. Boynton, elevator agent for the Santa Fe system, testified that in September the Santa Fe issued a circular offering free elevator service. This circular, he said, was withdrawn about October 10. He said this offer was made to secure greater tonnage, and was necessary, as other roads were adopting the same plan. "What is the difference between such a proceeding and giving a rebate?" Commissioner Lane asked. "I don't know that there is any difference," replied Boynton.

Commissioner Lane said the matter should be referred to the United States district attorney.

Perhaps the most striking comment on the enquiry at Kansas City was that of Commissioner Clark one day, whose judicial impartiality could not restrain the remark: "It is a surprising thing how many men there are in this business who don't know anything about the business, but are making a great success at it."

THE INQUISITION AT OMAHA.

Nathan Merriam of Merriam & Holmquist told the Commission at Omaha on October 24 that, "The railroads are not friendly to this market in that they have persistently made a discrimination against Omaha in the matter of freight rates. It has always been this way in Omaha. Because of railway discrimination the grain men are not in a position to bring the grain to Omaha. This is particularly true of northern and southern Nebraska and of that territory along the line of the St. Joseph & Grand Island Railroad and in South Dakota points. We have given up any hope of being able to receive or ship from St. Joseph & Grand Island points. The switching charges are generally refunded to the operators by the roads taking the grain out. This is a universal rule with the railroads, I believe. I would like to ask that the Commission will see that this discrimination against Omaha in the matter of grain and other freight rates by the railroads be stopped and that we be given some protection."

All the operators in Omaha fight the shovel men in the country, but not the farmers, and there is no combination among them to make prices. All swore they aim to get a profit of 2 cents on corn and 3 to 4 cents on wheat. They do not bid irregulars.

The evidence relating to switching charges and other privileges was very confusing to the expert. Evidently they are affected by the aim to "equalize" conditions for the elevator companies not favored by the U. P. elevation allowance; and only a rate expert can tell what influence that contract still has upon the status of the individual elevators, but apparently all switching charges are absorbed by the roads getting the grain going out.

Several country shippers appeared to complain of past treatment by the line companies and the railroads. The testimony on these points was not different from that reported in the last issue of this paper in its review of the testimony taken in the "elevator allowance case."

Tom Worrall, the "trust buster," was in evidence, of course. E. P. Peck of the Omaha Ele-

vator Company had previously sworn that he did "not know of any money being paid by the Nebraska Grain Dealers' Association to Worrall to withdraw his [anti-trust] suit;" and then Worrall was put on the stand. When asked how much money he got for dropping his fight against it, he said: "Now, Mr. Marble, if you insist, I'll tell you the exact truth about that matter, but I promised those fellows I wouldn't tell and I want to tote fair." "All right, you needn't answer it, then," replied Mr. Marble. Then Mr. Marble asked: "How came you to get out of the Association?" "I think the best time to close the door of the penitentiary is when you are on the outside."

Mr. Worrall is not in the grain business any longer; but in reference to his book he told Mr. Marble that—

My observations regarding the Nebraska Grain Dealers' Association were strictly true, but there were some side remarks in the volume that were not wholly or explicitly true, but they bordered very closely on the truth. The result was to show the farmers wherein lay the success of the Nebraska Grain Dealers' Association. Now, as a matter of fact, I do not think that the farmers were as badly used as the farmer said he was, or as the papers made him out to be. The Association did some good. I think 2 and 4 cents is a pretty fair profit even in the grain business. The tendency of the Association was to induce the dealers to combine. In some cases it did resort to a moral, never a physical, force, and did considerable pooling. When they got after a fellow he had to fall out; he could not stand it forever. I afterwards became manager and an active stockholder in another grain concern that operated what was known as farmers' elevators, but these were operated along the same conditions as line elevators, and that is what brought on the unpleasant relations between me and the Grain Dealers' Association.

I believe in the policy of maintaining prices and a division of business. . . . I closed a deal in conjunction with a couple of men at Elgin with the Nye-Schneider-Fowler Company for a farmers' elevator, bought it and then the Nebraska Grain Dealers' Association proceeded to boycott me. They would not buy grain of me, or, if they did, they bid less than to others, so this was a big loss to me and subsequently ruined me, I then brought suit against forty-five or forty-six of the Association. This was in June, 1905. I believe the suit is still pending, though I did some time ago sign a stipulation for its dismissal. Oh, yes; I received some compensation, but I do not like to state the amount of the consideration."

Commissioner Lane: "You need not do so."

Mr. Worrall: "I could do so if you insist, but I would much rather you get the tip from the other fellow. Yes, the compensation was substantial."

Mr. Marble: "We have received the tip from the other fellows at Chicago."

Mr. Worrall: "The reason I stipulated to withdraw the suit was that first it was a better proposition, and second was that I was dead broke. I would not like to give all of the transactions, as I expect to get into the grain business again shortly. I want to see the terminal charges eliminated. I did own an elevator at Council Bluffs, but the road did not compensate me by elevation allowances. I put in a claim, but they refused to pay it."

Q. E. D.—Was it the Association or the bidders at Omaha Mr. Worrall calls "the association?" Or does Mr. Worrall consider the bidders at Omaha to have been the Nebraska Association? There seems to be a confusion of terms here; for how could the "association" boycott him—it never bought grain? Mr. Worrall ought to distinguish between the independent members of that association and the line men; or didn't the independents count in Nebraska?]

DES MOINES WAS ON THE LIST.

The enquiry at Des Moines opened with a review of the Simonds-Shields Grain Company affair at Kansas City, J. T. Hiland, third vice-president of the Milwaukee road, being the witness. He did not hesitate to corroborate the arrangement at Kansas City that enables Shields as railroad employe to give the Grain Company of which he is manager unusual favors and advance information, obtained from Hiland himself, of immense benefit to the Company as grain buyers and shippers. Mr. Hiland added that the C., M. & St. P. elevators are not leased to highest bidders, but to firms which are big shippers, who do a big business

and who are responsible and capable of handling a big business. To this extent, the witness testified, the company favored the big shippers. Mr. Hiland said the company should receive higher rentals for its elevators, but that if he had owned the road and had been leasing his own elevators he would have done exactly as he did for the company.

Coming back to Iowa matters, the Commission learned that the price cards used in that state are sent out from Des Moines by Ward G. Case, who is secretary of the Des Moines Cereal Club. Members of the Club denied that the Club itself as such had ever voted to fix prices for grain or to give its endorsement to the Case cards; but R. W. Harper testified that as a guest of the Club he had often attended its banquets and meetings, which were held at the Grant Club weekly, and that after discussion of prices the vote of the meeting was taken on motion by the presiding officer, George A. Wells, expressed by lifted hands, as a basis for quotations for the ensuing week furnished to members of the Association by Ward G. Case of that city. Mr. Case himself denied that the prices on his cards were fixed by the Des Moines Cereal Club, but were made by himself.

C. G. Messerole, president of the Farmers' Grain Dealers' Association of Iowa, testified that regular dealers pooled their grain and that prices are fixed at country stations by the Case cards. Several country dealers testified to pooling with their competitors, the line elevator companies.

Secretary Wells said the state Association formerly encouraged pooling arrangements but has not done so in the last two or three years; that it has nothing to do with prices; and that it is not engaged in unfair competition with the independent or irregular elevators.

M. McFarlin and E. L. Bowen testified that so far as they knew the Des Moines Cereal Club did not attempt to fix prices, though prices were discussed, and that the Case card carried no obligation to any concern to observe it, being merely the conclusion of Mr. Case as to the market, and is not authorized, so far as they knew, by the Cereal Club formerly, or the Iowa Grain Dealers' Association now.

Secretary Wells admitted that indirectly the Iowa Association has attempted to keep irregular elevator companies from gaining a terminal market, by calling the attention of receivers to the fact that they were dealing with irregulars, and depending on the well-known sentiment against irregulars to induce cessation of the business dealings between the two; and the members of the Association were notified of the firms which bought from irregulars that the sentiment might be effective. A vast amount of documentary evidence was offered on this point, being letters to and from Mr. Wells on these matters.

"Why do you object to the penalty clause?" asked Commissioner Clark.

"It puts the regular dealer out of business. He can make no profit and compete."

"Then the grower of the grain must be prevented from marketing his product unless he pays tribute to the elevator?" suggested Mr. Clark.

"Not that exactly; the farmers' elevator is not successful and it is a monopoly."

"Well, your object then is to prevent by combination what the farmer is trying to do by combination."

"The farmer was first in the field."

Commissioner Lane asked if it was the purpose of the Association to lower the price of grain to the farmer. Mr. Wells said it was not. "Then," asked Mr. Lane, "what is the meaning of the language in your letters about your members getting the full shipping value of the grain?"

Mr. Wells explained then the points of competition between the co-operatives, the penalty clause farmers' and the regulars. The penalty clause elevator does not limit its customers to its members, which makes its competition unfair.

Mr. Wells then went into the objects of the

Iowa Grain Dealers' Association, which he explained at length. Among other things he said:

The total grain production of Iowa is approximately 565,000,000 bushels, including all kinds of grain, and on the basis of estimate mentioned (80 per cent consumed on the farms) there would be about 113,000,000 bushels for shipment, or to be handled through the hands of grain dealers, giving an average volume of less than 65,000 bushels of all kinds of grain to be shipped by each grain dealer. It is true that some dealers handle more than this amount. However, the railroad companies have evidently considered that about 125,000 bushels is the maximum volume for each elevator, and that when this amount is exceeded additional elevator sites are granted.

The cost of operating a modern country elevator, keeping an open market, so that the farmers may sell grain in any quantity at all times, may be conservatively computed as follows: Interest on cost of plant valued at \$4,000 at 6 per cent, \$240; interest on working capital, \$1,000, \$60; salary of manager or proprietor, \$900; insurance, taxes, postage and stationery, \$100; power, \$100; extra help, \$100. Total, \$1,500. The life of an elevator building and machinery does not average to exceed twenty years, and it is only good business mathematics to add \$200 per year for the maintenance of property, thus making the expense about \$1,700 per year, or approximately a cost of 2 cents per bushel for operating such a business.

There are hazards and uncertainties in the grain business that are not apparent to the public or to the novice in the business, and the country grain shipper "always pays the freight" in the full sense in which the term is commonly used; in other words, he usually assumes all risks and chances on the grain from the time he receives it from the farmer's wagon until it is delivered to the point of unloading.

The farmer practically always gets his money on the spot. The grain may get out of condition and deteriorate in value while in the elevator or in transit, and besides the grain may be delayed in transit or at terminals, and there may be mishaps, such as leakage and stealage in the terminal yards, all of which chances fall to the country shipper, as by custom he must sell on delivered terms, so far as weights and grades are concerned. In other words, the country grain dealer stands in the gap between the farmer and the terminal market, and he assumes all the hazards and chances.

The country grain dealer is always in the lime light. The railroads insist that prices be high enough to protect their interests, and merchants, bankers and business interests of every community are perfectly willing that he should conduct the business even at a loss, in order to bring trade to the town; and farmers have been known to wilfully misrepresent prices paid at other stations in order to induce him to pay up. The scooper is a welcome hero if he can cause a grain fight, while in the very same town there may be an ordinance requiring a peddler or transient merchant to pay a license, and vacant store rooms be rented by the established merchants in order to prevent competition. The volume of the business of the grain dealer is absolutely limited, and there is no possibility within his power to increase it, as is the case with merchants or manufacturers. The expense account mentioned is applicable to any concern operating such a business, whether private or co-operative.

The hazardous chances in the grain business practically decide whether there is profit or not, and that these conditions may be eliminated so far as possible and also that other benefits may be also accomplished, the Iowa Grain Dealers' Association has performed a work along many broad lines.

Now, then, continued Mr. Wells, the objects of the Iowa Grain Dealers' Association [and those of other states he might have added in a general way] are as follows:

To make investigations and exercise influence to secure improved methods and correct abuses in terminal markets, transportation and the grain trade in general, to the end that the distribution of grain may be done most economically and with the least possible loss and waste.

To promote general information and discussion regarding grain trade questions, the following of which is a partial list, to wit:

Relating to local conditions—Use and necessity of written contracts; uniformity of storage rules and charges; advancing money on stored grain; insurance; cooping, loading, sampling, sealing and billing of cars; perishable shipments of grain, billing of.

Relating to transportation conditions—Car shortage; car equipment and motive power supply; delays in transit; delays in terminal yards; leakage and stealage en route; car sealing systems; re-sealing and inspection; public record of seals and

repairs en route; shrinkage, allowances in settlement of shortage claims; use of written application for cars; car door lumber; bills of lading, conditions of, etc.

Relating to terminal trade conditions—Commission merchants and their relations and obligations to the shipper; bunching cars in making sales on Board of Trade; selling consignments to themselves; neglect to return documentary papers to shippers; track bidders, their terms; discounts because of missing grades; disposition of rejected shipments; defaulted contracts, settlement of.

Relating to terminal market conditions—Inspection of grain; weights, carload dockage; extra charges against the shipper; delayed inspections; rejections; police protection; record of physical condition of cars.

To disseminate information pertinent to the grain trade we send our members two general letters monthly, one going out about the 25th, and the next about the 2d of the following month. In the first we enclose any circular letters of inquiry, such as information to use in compiling crop or other reports, and the compiled reports go out in the second letter mentioned. Circular letters relating to subjects of general interest to grain dealers are also enclosed in these regular mails.

Arbitration and the settlement of differences, as between buyers and sellers, is an important work of this Association.

Legislation is given such attention as is consistent to the best interests of our members; in fact, we have never taken any part in legislative matters for the direct interest of this Association, except in securing the enactment of a bill relating to the landlord's lien. We have always used our influence more or less to assist the Iowa State Agricultural College in obtaining necessary appropriations to carry on its work along agricultural lines.

Crop reports are a special feature of the work of this Association, such reports being compiled and published monthly.

We also compile a monthly estimate of the stocks of grain in country elevators.

We make a special work of collecting freight claims for our members. We do not, however, care to have the members place all freight claims with us, but rather the refused claims, so that we may examine and determine as to whether such claims have merit or not.

We constantly employ a scale expert and systematically offer opportunity to our members to have their scales inspected and repaired annually at a minimum cost.

We have given much time and contributed some money to the encouragement and improvement of the grain crops. We organized the first general "Seed Corn Special Train" propaganda.

This Association, by its influence and continuous efforts, has been largely instrumental in the establishment of public supervision of weights at Kansas City, St. Louis, Memphis, Cairo and Peoria, and also the establishment of a systematic method of making record of the physical condition of cars on arrival at terminal elevators in order that the shipper may have official evidence of loss because of leakage and stealage en route. These records show that upward of 40 per cent of the cars of grain arrive at terminals in bad order.

In response to the demands of different grain dealers' associations in which this Association has acted a prominent part, carload dockage has been abolished or reduced in the different western terminal markets. Previous to the existence of grain dealers' associations, carload dockage depended simply on the buyer's disposition without any official regulation. The Kansas City Board of Trade still authorizes a carload dockage of 100 pounds per car. The Railroad and Warehouse Commission of the state of Illinois authorizes a carload dockage of 100 pounds per car at public elevators at East St. Louis. Chicago Board of Trade authorizes a carload dockage of forty pounds and Minneapolis thirty pounds per car.

On October 20 Geo. S. McReynolds was again indicted by a grand jury in Chicago, on evidence furnished by the Corn Exchange National Bank, the charge being removal of grain without the consent of the holder of the warehouse receipt.

Early in October the SS. B. F. Jones sailed from Duluth with 370,273 bushels of wheat on board, and was followed by the James Laughlin with 378,000 bushels, the largest cargo ever floated on fresh water. This record was beaten a few days later by the W. P. Snyder, which left Ft. William with 380,000 bushels of wheat for Buffalo. The Laughlin on the following trip took out of Superior 393,000 bushels of flaxseed, giving the ship the flax record of the lakes.

THE INDEPENDENT GRAIN DEALER.

Have the so-called independent grain dealers at country points, operating one or but few elevators, been enabled, during the last few years, to hold their own against the great line elevator systems; and, furthermore, will they increase in numbers relatively with the big companies? These questions cannot be fully answered by merely counting the elevators built or acquired during the past few years; for the general influences and conditions surrounding the grain trade need to be considered.

In the midst of the general agitation of the questions of rebates and discriminations granted by railroads to favored shippers, the fact is frequently overlooked that, in the history of railroad operations in the Northwest and on lines bringing grain into the Minneapolis market, there has been, for many years, a continuous practice by the railroads of uniform treatment to all. The importance of this cannot be overestimated. Under such a condition it is, therefore, not surprising that the individual, owning and operating one elevator at a country point, with proper business methods, is enabled to conduct a successful business side by side with the larger so-called line companies operating great systems of elevators.

The individual country shipper pays the same freight rate and gets the same treatment as to the disposition of cars, etc., that is accorded to others; and he, therefore, is enabled to carry on his business free from the handicap of any unfair competition from a specially favored competitor. The Minnesota Shippers' Association and others are asserting that the rates charged by railroads are too high; but there is very seldom heard any complaint that, at any station, two shippers are treated by the railroads in a different manner, one from the other. Such a condition naturally offers an opportunity for individual success, which would not be possible were favored shippers enabled, by lower rates than their competitors, to practically destroy competition.

It is a matter for congratulation, that there should be this condition existing in the Northwest; and, in fact, to some degree, the general prosperity of the Northwest can be attributed to this uniform treatment of all the people by the transportation companies. The welfare of every community is affected to a great degree by the policy and methods adopted by its railroads, and the policy of uniform treatment referred to, which has aided to some extent to make success in the Northwest dependent upon merit alone, makes for the good of society in general, and, in a broader sense, is a factor in producing a high and better civilization.

The methods and work of the Chamber of Commerce of Minneapolis also have a direct bearing upon this question of relative growth of independent shippers. Does the independent shipper with an occasional car of grain stand an equal chance in the matter of prices and treatment with the big companies? The upright and open-and-above-board character of the business relations existing between members of the Chamber of Commerce, and the high degree of fairness with which the Chamber of Commerce, as an institution, deals with its members and the public, insure a condition which gives opportunities to all alike. This is daily being demonstrated by the returns to shippers by the commission houses. The Chamber of Commerce being the only grain exchange in Minneapolis, and the business of the country shipper being that of buying grain at the country points and shipping it to the Minneapolis market, the country shipper naturally must look to one or more members of the Chamber of Commerce to aid him in the sale and disposition of the grain at the terminal market, as well as for advice and suggestions, and frequently for financial aid. Because of the high standard of membership maintained by the Chamber of Commerce and its open and perfectly systematized market, the country shipper

finds himself able to make his business arrangement in this market safely and advantageously, and to make use of all those instrumentalities for safely conducting his business which have been devised and perfected through a series of years.

In short, a study of the general situation of the grain trade in the market of Minneapolis and in the country tributary to that market cannot help but bring one to the conviction that it is most fortunately surrounded. It typifies, to quite a marked degree, President Roosevelt's "square deal."

An investigation of the number of country grain elevators in the Northwest built and acquired during the past few years by line companies and by independent dealers shows about the same relative increase for each; and, while the country elevator business shows only a modest return, considering the investment, credit and attention to detail that it requires, yet it seems natural to expect that, in the future, independent shippers will grow in number and keep pace with the growth of line elevator companies.—Jas. V. McHugh in the Commercial West.

SOLUTION FOR WATER BARRELS

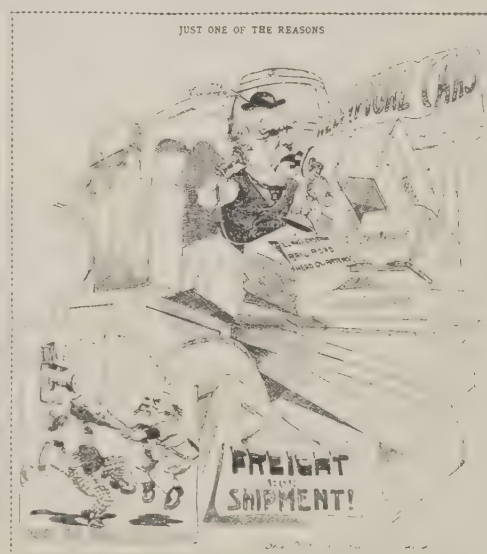
Millers whose plants are provided with barrels of water for protection against fire realize the importance of preventing the water from freezing during the cold winter months, and the first hint of frost in the air brings demands for information regarding a solution that will not be affected by low temperatures.

Without doubt the most satisfactory solution for fire barrels is one made by dissolving calcium chloride in water. It has the approval of the underwriters and is so much superior to salt brine that there is no comparison.

The calcium chloride is dissolved in the water in varying proportions, according to the degree of cold the solution is expected to withstand. Five pounds of calcium chloride to each gallon of water makes a solution that will not freeze until the thermometer registers 39 degrees below zero. This solution will not evaporate, nor will it rust the iron hoops on barrels. It has no odor and will keep sweet an indefinite length of time.

PORT COLBORNE ELEVATOR.

The Montreal Corn Exchange has been notified by the Department of Railways and Canals of the Dominion government that the department had decided to reduce the storage capacity of the elevator to be erected at Port Colborne, Ont., to 800,000 bushels instead of 2,000,000 bushels as originally intended, and that such reduced capacity would be tried for one year in order to see if the business could be satisfactorily handled, and that should it be found that this capacity is not sufficient it will be increased, but not to exceed 2,000,000 bushels.



WEIGHING AT OMAHA.

The grain committee of the Omaha Grain Exchange on October 30 reported to that body a plan for supervising the weighing of grain going through the elevators at that terminal. The plan provides for the hiring by the Exchange of a weigher for each elevator, exclusively in the employ of the Exchange, and under bond, whose duty it will be to check every car weighed. These weighmasters will be changed from one elevator to another from day to day, thus making each one a check on the other. In other words, the market weighing system will be modeled on the best systems in use elsewhere.

GAS ENGINE STARTING.

Operators who start their engine most successfully and with the greatest ease not only count on always igniting and exploding the first charge of mixture taken into the cylinder, but they have so studied the engine and its accessories as to insure the greatest confidence in their ability to start it easily.

If it is known that the valves on the engine are in good condition, that they open and close at the proper time, that the igniter points are clean and make a firm contact and a quick, clean break, if the hammer-break spark is used; that the spark plug is clean and in good order, if the jump spark is used; that the wires and coil are well insulated and properly connected up to both engine and source of current, whether battery or generator; that there is no short circuit, either within the battery cells or outside; that the battery elements are not exhausted, but strong enough to produce a good, strong current; that the dynamo or generator, if one is used for generating the current, is in good condition and generating a current of sufficient strength to produce a good, live spark; that the fuel is feeding in proper proportions to the engine, then an unsuccessful start need not be feared. The engine will start off easy and run right up to good speed, and carry its load easily.

These are by no means all the points one needs to know to always secure a successful start, but they are some of the important things a good operator constantly has in mind. In the case of any irregularity in the running of the engine, the close observer knows immediately where to search for the cause of the irregularity, and when it is located the remedy at once suggests itself.

Some reader who is not familiar with the principle upon which the gas engine operates may become discouraged after reading some of the things a good operator has constantly in mind. This does not mean to convey the idea that he is continually thinking them over, but has them stored up in a small corner of his memory ready for use at a moment's notice, should occasion present itself. The secret of success in starting a gas engine is to know every detail of the principles upon which it operates, as well as to know every working part of the engine and the function it has to perform, and whether it is in proper condition or adjustment to perform its work.—Gas Power.

NO EXTRA FACILITIES AT PHILADELPHIA.

The request of the Philadelphia Commercial Exchange that the Pennsylvania Railroad Company should erect a new and modern grain elevator at Philadelphia in addition to the road's present facilities has been refused by that company. The company claims that the grain-exporting interests of Philadelphia are not now suffering in any way from lack of elevator facilities. There is no concealment of the fact that the Pennsylvania Railroad management is strongly averse to expending the \$500,000 necessary to build and equip a large and thoroughly up-to-date elevator, such as the grain trade has urgently asked as necessary to

place the port on a fair competing basis with Baltimore; but will content itself with the modifications of its old facilities as outlined in July last when the company announced certain contemplated improvements to the Washington Street elevator. This elevator, however, the grain trade contends, is so antiquated and limited in its ability to receive grain as to be useless in handling a large business. Moreover, nothing has been done by the Pennsylvania Railroad toward carrying out even the makeshift improvements promised in July.

KICK ON INSPECTION.

The following is a report of the meeting held at London on November 8:

Representatives met at London from the following associations: London, Liverpool, Hull, Bristol, Leith, Glasgow, Paris, Lille, Dunkirk, Havre, Antwerp, Genoa, Hamburg, Cologne, Duisburg, Amsterdam, Rotterdam, Rijswijk, Copenhagen, Aarhus, Mannheim and Millers' associations. There were also merchants from Belfast, Ipswich, Dublin, Cork, Sligo, etc.

This meeting resolved that the present system for certifying grain is unsatisfactory, and pledged itself to obtain alterations in the method to secure proper protection to European buyers. Furthermore, it was resolved to ask American and Canadian centers to supply a copy of the regulations concerning inspection. Again, representatives of millers and German associations resolved that the finality of certificates be abolished.

The committee appointed seven British and seven Continental members to negotiate with the United States and Canada concerning the above-mentioned resolutions.

DENATURIZED ALCOHOL REGULATIONS.

The Internal Revenue Department has announced the regulations governing the handling of denatured alcohol. There will be two classes of denatured alcohol; first, that styled completely denatured, which will pass into general use for general consumption and can be purchased at the stores without limiting regulations as against the private consumer; and, second, special denatured, in which the material demanded by the special needs of certain manufacturing interests will be regarded, with limitations as to the use of this class, confining it to the special manufacturing industries for which it is prepared. This special denatured alcohol will be kept under strict surveillance and governmental supervision. For the completely denatured article, to every 100 gallons of ethyl alcohol will be added 10 gallons of wood alcohol and one-half gallon of benzene. The denaturing process will be accomplished in the distillery plants where the alcohol is produced, in special bonded warehouses.

The ingredients selected for denaturing to meet the necessities of special manufacturing industries will only be used where it is made perfectly apparent to the treasury department that the industrial interests involved cannot use completely denatured alcohol because of the presence of wood alcohol and benzene, and in that case some other denaturing agent which will accomplish the purposes of destroying, as far as possible, the potable or beverage qualities of alcohol, and at the same time adapt the denatured article to the special use for which it is desired, will be determined upon.

Many manufacturers recover large portions of alcohol originally used and reuse it. This privilege will be extended to the denatured product and, if necessary for its reuse, the proprietors of manufacturing plants will be allowed to redistill the recovered alcohol, under governmental supervision.

Trouble with the longshoremen and grain handlers in Portland, Ore., has resulted in the sending to Seattle, Wash., of ships which were to

have taken on their cargoes at the Willamette River docks. The Exporters' Association of Portland has announced that all grain ships going to Portland light will be diverted to Puget Sound.

INDUSTRIAL ALCOHOL COMPANY.

The announcement was made in New York on October 18 that the Industrial Alcohol Company, which, it has been reported, will control and develop the denatured alcohol business of the Distillers' Securities Corporation, has been practically financed and is ready to be launched. The capital stock will be \$18,000,000, of which \$6,000,000 will be preferred and \$12,000,000 common.

Flower & Co., New York bankers, in speaking of the reports that they have financed the new company, say: "It is true that Flower & Co. have financed such a proposition. Practically every other statement published about the proposition is untrue. The plans to be effected are still unformed. It will take the balance of this year to consummate the project, and until this is done everything except the financing is guesswork. When the matter has been arranged so that a final and definite course has been determined upon, the real facts will be published. If the course that we intend to pursue is followed, the new company in its business arrangements will necessarily be very advantageous to the Distillers' Corporation."

GRAIN GROWERS' DEMANDS.

The Manitoba Grain Growers' Association at a meeting held at Portage la Prairie adopted resolutions on October 25, demanding:

"That there should be allowance to owners of all screenings composed of oats, barley or wheat taken from grain, either at Port Arthur or Fort William.

"That weigh scales be so placed in elevators as to be in plain view of parties delivering grain while the operation of weighing is in progress.

"That whenever the quality of wheat makes it eligible for any particular grade it should be so graded regardless altogether of any dockage.

"That all wheat subject to dockage be cleaned before being binned in terminal elevators."

Query: Why don't the aforesaid grain growers clean their grain on their own farms and keep the screenings at home, so that no one would have to pay freight on them to Ft. William or Port Arthur?

"FUTURES" ARE LEGAL TRANSACTIONS.

In the case of Thos. A. Cleage Jr., the United States Circuit Court of Appeals at St. Paul, on November 8, declared valid and legal the contracts for the purchase and sale of grain for future delivery as it is practiced by the Chicago Board of Trade and the Merchants' Exchange of St. Louis.

Cleage, an adjudged bankrupt, during his amazing splurge at St. Louis not long ago, dealt in about 14,000,000 bushels of wheat, of which it appeared less than 2 per cent was actually delivered. When W. H. Laidley and others, after his "bust," sued him on their accounts, he claimed he was not legally indebted to any of the alleged creditors for the reason that their claims against him were grounded upon wager agreements and therefore were void.

The Court of Appeals holds the evidence did not disclose a purpose to settle the contracts by paying or receiving the difference between the contract prices and the market prices at the time of delivery and did not make the transactions wagers and void.

Texas reports show a shortage of from 2,000 to 3,000 cars during one week the latter part of October.

The Illinois Manufacturers' Association on November 2 went on record as favoring a reciprocal demurrage law for the state of Illinois.

FACTS AND FIGURES

Spelt is becoming popular with North Dakota farmers as horse feed, being substituted for oats, and a combination of spelt and oats is recommended as excellent.

Complaint is made that speculators have been able to get hold of prison made bags from the Walla Walla factory and have made big profits out of the ranchers' necessities.

The first car of new corn arrived in Baltimore on October 22 over the Baltimore & Ohio Railroad from Central Illinois. The new corn was of splendid quality and in good condition.

Governor Davidson of North Dakota has recommended the appointment of H. D. McKillop of Niagara, N. D., as a member of the Superior Grain Inspection Board, vice Swanson, resigned.

Pennsylvania will have a corn show in connection with the Live Stock Breeders' Association's annual meeting at Harrisburg, January 22-25, 1907. E. S. Bayard, East End, Pittsburg, has the prize list in charge.

The British S. S. Glenaen was chartered to take out from Boston in October 160,000 bushels of durum wheat for the Piræus (Athens), the first shipment to that part of Greece ever sent from Boston.

Farmers and grain shippers of central Illinois have effected an organization at Monmouth to be known as the "Military Tract Shippers' Association," the object of which is to compel the railroads to give better service.

When the conference was held recently between the grain men and the railroads at Kansas City, at which it was agreed that the new rule cutting down the free time on cars of grain should be made to read twenty-four hours, beginning at 7 a. m. following notification that grain was here, a very important matter was entirely overlooked. The grain men forgot all about making any provision for reinspection, and they now ask that the new rule be so amended that in case a car needs reinspection an additional twenty-four hours can be allowed free for that purpose.

Recently the Burlington Railroad opened its new elevator at Harlem, Kansas City, Kan., which replaces the one burned. The plant is constructed of steel, brick and concrete and comprises a warehouse, boiler and engine house, dryhouse, trackshed and tall smokestack. The building has a concrete foundation built over 1,284 deep-set piles, and the warehouse is 167 feet high. Forty-two circular tile bins have a capacity of 450,000 bushels of grain, and the track facilities will accommodate twelve cars, which may be unloading, and eight that are loading. The elevator is equipped with its own electric light and water plant. It will be operated as a public elevator.

The American Society of Equity, at its East St. Louis convention in October, "fixed" prices of farm products, and bound the members of the Society not to sell products at less than the following prices: Wheat, No. 1 Northern or No. 2 red, \$1; corn, to the end of this year, 45 cents; from January 1 to April 1, 50 cents; after April 1 and until prices are again fixed, 55 cents; oats, 40 cents; barley, No. 2, 55 cents; rye, 75 cents; buckwheat, 70 cents; potatoes, Irish, 65 cents; sweet, 75 cents; beans, navy, \$1.50; red, \$2; cotton, 12 cents; wool, 30 cents; hogs, \$6.50; cattle, \$6; sheep, \$5.50; hay, \$14; broom corn, \$75 to \$100. In nearly all instances this list of prices is to be based on Chicago markets, the exceptions being the price for beans, which is based on Detroit quotations, and cotton on New York. It was explained in the convention that members must receive the prices named, less the cost of transportation. There were stormy scenes in the convention when the fixing of prices was opposed on anti-trust grounds.



PUBLISHED ON THE FIFTEENTH OF EACH MONTH BY

MITCHELL BROS. COMPANY
(INCORPORATED.)

OFFICE:

Manhattan Building, 315 Dearborn Street,
CHICAGO, ILL.

HARLEY B. MITCHELL, Editor
A. J. MITCHELL, Business Manager

Subscription Price, - - - \$1.00 per Year
English and Foreign Subscription, - 1.60 " "

ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., NOVEMBER 15, 1906.

Official Paper of the Illinois Grain Dealers' Association.

THE PUBLIC ELEVATOR.

The Santa Fe Elevator, of which we print a picture and description in this issue, is as remarkable from a business point of view as it is interesting physically speaking. For it inaugurates in Chicago a return to the public elevator system, for which, up to not many years ago, this was one of the most famous cities in the world. The house is not indeed in the "regular" class, but for the first time in many years it gives this market a house to be used by the public for storage, cleaning, clipping, mixing and drying on terms that will enable the public to use it.

It is a favorite remark of the elevator people that grain will not go of its own accord into public store in Chicago. Of course it won't, so long as the private elevators control the public ones and are able to use the 3/4-cent first storage charge as a club to knock the public grain; and since there has been no house in which anyone not a private elevator owner could dry, clean, clip or in any way condition his grain, what could he do with it but sell it to the private elevator people and let them earn all the profit that is made on warehouse manipulation of grain?

When one stops to think of it, isn't it absurd that such a condition of things should have so long existed in this, the greatest grain market on earth? Nothing but an "unholy alliance" of carriers and private companies could have reduced this market to such an extremity.

But a beginning has now been made here, as well as at Omaha; at Kansas City, where the new Burlington transfer house has just been opened as a public elevator; at New Or-

leans, where the Illinois Central Elevators are now public houses; and all other markets will follow. What is more, all others of the granger roads will have to follow this new "Santa Fe Trail," and we understand that several of these roads have already notified lessees of their houses that their leases will not be renewed.

"CORN A-PLENTY."

With a yield of 173,000,000 bushels greater than any previous crop, the American farmer has corn "to burn." But none of it will be burned. One of the surprising things about corn is the way it is absorbed. In spite of the record-breaking crop of 1905, at August 30 Chicago stocks were the lowest in years, going to demonstrate again, as had been before, that the consumption of corn keeps pace with production when it does not, indeed, outrun it.

There are many reasons for this: The increase of population; the larger use of corn on the farms; in the brewing industry, which has long since outrun the barley supply and is using corn grits and producing a stable and palatable beer; in many industries other than the starch factories and distilleries, which use corn in larger quantities with each succeeding year; while corn flour would be much more largely used by families if it were properly advertised and placed on sale at retail—a superb article of food practically unknown to the public au naturel.

So don't let your patrons waste their corn—it will all be needed. Let them hold it until it is ready to market, stored in good cribs, shelling and hauling it only when it is fit to store or only as fast as you can ship it out this winter with profit to the grower and yourself.

COMMON SENSE NEEDED.

The lopsided evidence taken at Chicago upon the effect of the Chicago "call to arrive" rule has gotten that matter into the newspapers, which, with their natural ignorance of technical details, have not only volunteered much foolishness of their own, but printed half-baked opinions of grain traders who ought to know better than to talk overmuch. For example, one C. A. Tower, a Des Moines buyer for a Chicago house, tells the News that the Chicago Board of Trade is a "trust," because the call rule is in operation. The Northwestern Agriculturist says that because of the call "competition is absolutely nil." The Peoria Star, always noisy and cock-sure of itself, if not learned or wise, says the call is "the outcome of the war against bucket-shops" whose "methods are precisely those pursued by the Board," etc.

Now there was not a syllable of evidence taken by the Commerce Commission going to show that the call has operated so far as a restraint of trade. When asked point-blank if they had been prevented from bidding all they wished to bid for corn and oats, even the objectors to the call, "who never used to ask for company when making prices," said they had not, but that they might be; that the rule had not restrained trade, but would—in the future. On the other hand, the witness who approved the

rule said it had benefited prices and that it had equalized card bids with prices buyers would bid on the floor of the Exchange, and so had prevented one kind of hammering of prices there that had been openly practiced by the elevator operators. Certain bidders objected to the call because it makes them "show their hands" and bid the market.

The fact is, the public is in a state of hysteria about "trusts," 90 per cent of which are pure figments of the imagination and 90 per cent of which will be destroyed the minute the executive departments of the state and nation convince carriers and recipients of special favors from carriers and other public utilities that these utilities must give all business men equal privileges and all the privileges the laws authorize. So with all regard to the disinterested parties who are making this row about the call, and so are contributing to the misinformation the yellow papers are studiously circulating about the grain exchanges generally, it is respectfully suggested, as a matter of some common sense, if they talk at all, they talk understandingly and not so as to invite more prejudice when they ought to be busy trying to allay it.

THE "GRAIN TRUST" INQUIRY.

A large amount of space is devoted in this issue to the inquiry into the conduct of the grain trade by the Commerce Commission; not because this paper agrees that the testimony taken is necessarily valuable as an index of current methods, but because the report, imperfect and one-sided as it is, will give grain men some inkling of what the Commission has been able to find of truth, in part, and of much ebullient "tommy rot," whose contemplation had greatly distressed certain promoters and the victims of imaginary wrongs until they found relief on this occasion.

The hearing at Chicago, for example, covered a greater scope than elsewhere; and for that reason was the more conspicuously ex parte in character and inconclusive. Early in the inquiry a man was called to the stand who declared amid a flood of tears that the Illinois Association had ruined him; though it appeared that in doing so, conceding the truth of the testimony, the association was but protecting its members from one who had apparently set out to "do up" every other grain buyer in his neighborhood and "hog the business." Now, of course, no honest man will defend downright unfairness to dealers or producers; but whether Illinois men actually destroyed the business of the witness or injured the producers did not appear, except from this unsupported testimony, a defense to which was neither heard nor invited. Indeed, much as was said against the associations at Chicago, but one word was heard in their defense, and that was injected into the record by Captain Rumsey, who volunteered a statement that was not brought out by interrogation.

Take the matter of the "call to arrive" at Chicago. The track bidders and elevator men were given full scope to denounce the call as a restraint upon trade and a damage to this

market; while but one witness, Mr. Wetmore, was present to defend the call as a means of removing a restraint on trade instead of creating one. Mr. Wetmore was very clear in his statement in this regard; but his testimony was so rapidly passed over that one may well doubt if it had any effect on the Commission. Certainly it had none on the press representatives, who, taking their cue from the apparent policy of the prosecutor, Mr. Marble, and of Commissioners Lane and Clark, as indicated by their interrogatories, adopted the theory that the call is a restraint on trade, whose only apology was Mr. Wetmore's statement that it enabled one to make bids to the country immediately after the close of the call and "to go home early"! Yet even Mr. Bartlett was able to say, not that the call had actually prevented his bidding at any time all he had cared to bid, but that it might do so.

So, too, in Iowa the press generally declare the testimony at Des Moines proved that the Iowa Association "fixes prices" for grain, whereas C. G. Meserole, secretary of the State Farmers' Co-operative Elevator Association, the star witness, when asked, "Have you any information from any source that the members of the Iowa Grain Dealers' Association have an agreement among themselves to be bound by the Case card prices?" was forced to reply: "Only from hearsay and what was reported by other people"—probably commission house promoters of farmers' companies.

Of the relations between the roads and the line companies developed by the testimony at Kansas City and Omaha, it can only be said that is an old story; but what might have been said was not said, either there or elsewhere, to wit, that the independent dealer has suffered even more from that sort of collusion than has the farmer, and that if the farmer has in fact suffered it is because the independent dealer, who has stood between him and the line operators and has tried to hold up the market, was first destroyed by the unfair and illegal connivance disclosed.

GOVERNMENT STANDARDS.

The first authoritative statement of the purposes of the Government in establishing inspection laboratories at Baltimore and New Orleans is given by Expert Shanahan on a previous page. For the present the work will be tentative in character—a groping after something, the existence of which has been denied on this side by grain inspectors and shippers, but of which receivers on the other side have complained even recently, a consular report from Kehl, published on October 13, reporting that "it appears there is a movement all over Germany protesting against the condition in which American grain is arriving." (See also p. 249.)

There is no expectation of the immediate creation of Government standards; but clearly the Baltimore officials who issued the circular quoted on p. 239 would not "side-step" them, in any event; there is every probability they will be welcomed when they do come. Some of the Eastern newspapers are inclined to ridicule the idea that the Govern-

ment should "inspect and control all grains in the market for foreign trade"; but if this is done for meat, why not for grain or other food products or staple raw materials that should go out reasonably pure, but which the exporters may first sophisticate, with the natural loss of reputation for quality, which hits the producer more than it does the handler? The English buyer has already forced a reform of Indian contracts for wheat, by which dirt must be eliminated or paid for by the seller. All other exporters must sooner or later come to these terms or lose their hold on their markets.

THE ALLOWANCES CASE.

The arguments have been made in the "allowances" case before the Commerce Commission, which has the matter under advisement. It has indeed been rumored that the Commission has privately decided to call the allowances illegal; but no authorization of this rumor has appeared.

Under the law the "elevation," or unloading, of grain from the car is a part of its "transportation" and the charge must be included in the rate. In the former decision of this case the Commission held to the same view, but said that as the carrier was bound to render the service, it had the legal right to unload with its own facilities or pay someone else with facilities to do the work for it.

The difficulty in the situation, not properly presented on the first hearing, but made clear now, is to differentiate, in considering the actual payment made, the part thereof that is "transportation" pure and simple from what is a gift to a private elevator business; and as a corollary, what effect the payment to a private business of the allowance for a public service, dissociated from the differentiation indicated, would have upon the conduct of that private business, and its relations to its competitors. In other words, where in the 1¼-cents allowance does "transportation" end and private profit, and consequent private advantage due to the allowance, begin?

It is so fine a question it would seem that the carrier aiming to be strictly fair to all its patrons would "cut the knot" of the situation by separating itself wholly from any connection with a private grain business without forcing its customers to apply to the courts in self-defense.

SYSTEM IN GRAIN BUSINESS.

Few business men can abide the elaborate systems of "system" promoted by the business magazine advertisers, for they usually break down of their own weight, like mnemonic devices more difficult to remember than the things themselves to be remembered. Nevertheless no business can be very successfully conducted with any sort of comfort without some systematic method. Country grain dealers are perhaps not different from the average run of business men; but that does not excuse the absence of systematic bookkeeping and recording of business transactions that characterizes too many country grain men.

Two sources of loss are constantly referred

to by dealers—by shortages and by inability to ship grain, when it is ready to ship, for want of cars. But for both of these kinds of loss the carriers are responsible and are prepared to pay—if claims can be established by the claimants. To establish such claims, however, presupposes a systematic recording of one's business transactions—the weighing of grain into cars by means of a scale and not by filling to the stencil line in the car, with names of competent witnesses to the act, together with data as to condition of car on its removal loaded, noted upon the office record of shipments; and in the second place, a carefully made record of demands for cars, together with a statement of the probable profit would have resulted from prompt fulfillment of car requisitions, and of course memoranda of losses incurred through non-fulfillment. These are office entries easy to make at the proper time, and invaluable when needed. When a dealer fails to win out on claims of this character the fault will be with the man himself, and his failure will not be due to the "innate cussedness" of railway officials, who simply demand what is their right—proof that a claim is just and bona fide in every respect.

This does not, of course, exhaust the possibilities of reasonable "system" in a grain office—is only a hint of the pecuniary value of bookkeeping and record making within the easy reach of any man who undertakes to run a grain office at all. It is a part of that gumption that makes successful men.

MOISTURE CONTENTS OF CORN.

The Department of Agriculture has in press and will very soon publish a bulletin descriptive of a new apparatus designed for the purpose of ascertaining quickly and cheaply, as well as accurately, the moisture contents of a sample of corn. The apparatus is very simple, consisting merely of a sort of crucible in which the whole kernels are placed and subjected to heat in an oil bath, the moisture released escaping into a graduate which indicates automatically the percentage of moisture driven out. Any person of common sense can conduct the experiment, and the cost of the apparatus and of operating it will be nominal only.

The apparatus will enable every grain buyer or shipper to ascertain within a very few minutes the moisture contents of any sample of corn, and for those who use it it will remove entirely the element of guesswork in that regard. Add to this a simple cleaner and a scale, and a country grain dealer ought to be able to tell exactly how his grain should grade at destination, or how he should grade corn offered him for sale, if he dare not rely upon his unassisted judgment.

The Canadian Grain and Stock Co. has been granted a license to "deal in grain" (?) at Winnipeg. And so the bucket-shop gamblers driven out of Minnesota and the Northwest find lodgment again and advertise: "We are going to raise the price of grain from 1 cent to 5 cents per bushel to the farmer by bringing him into closer touch with the market." Oh, there'll be the touch, all right.

Editorial Mention.

The Illinois Grain Dealers' Association will meet at the Auditorium, Chicago, on June 11 and 12, 1907.

Ohio and Indiana dealers who are in the weevil belt will find some suggestions for their protection on page 239.

Cincinnati is getting ready to invite the Grain Dealers' National Association to hold the next annual convention there.

The terminal hay shed is the next facility the railways will be required to furnish to put that commodity on a par with other goods they carry.

The Indiana Grain Dealers' Association will meet in annual session at the Claypool Hotel, Indianapolis, on Thursday and Friday, January 17 and 18, 1907.

The Buffalo Corn Exchange has recently printed in pamphlet form the grading rules now in force in that market. Copies can be had of Secretary Fred E. Pond.

Vice-President Grammer of the New York Central Lines estimates the 1906 crop as representing 13,753,753 carloads, a decrease of 173,793 carloads from 1905. All right; now let's have the cars.

A call will be issued soon for a meeting of organizations interested in the passage of a reciprocal demurrage law in Illinois, to be held at Springfield before the meeting of the legislature elected on the 6th inst.

The National Hay Association continues to fire members who will not arbitrate differences. There is no temporizing, the Association believing that anyone who agrees to play the gentleman and fails to try to do so on proper occasion should be "run out."

The "Corn Specials," or good farming lecture trains, have worked eastward and are this winter at work in the Central and Eastern states, as well as in New England and the corn belt. Thus the leaven of the Iowa Association is leavening the whole mass.

The raising of the per diem charge to railways for the use of foreign cars to 50 cents will aid the quicker handling of cars; but in this crisis much depends on shippers and receivers also, who should remember the Golden Rule and "get busy" when cars are in their possession.

The scoop-shoveler got no sympathy in the Commerce Commission inquiry. He was treated there like any other kind of business man who has his office and his assets in his hat—a party to be watchful of. Most farmers who appreciate honesty and a regular market, open at all times, do the same. But others, who are willing to sacrifice their own friends and their own future convenience for an imme-

diate gain of a fraction of a dollar on a wagon-load of stuff, are the men who keep the scooper in business—when the elevator men can't "get at him."

The farmers at Monticello, Ill., have bought the Knight Grain Co.'s elevator and it is expected the suit of the latter involving the penalty clause will be dismissed. A dismissal would be regretted. But did the farmers think this purchase the "better part of valor"?

Just where the Commerce Commission is going to land next with its inquisition under the La Follette resolution is not announced; but Milwaukee and Minneapolis both expect to see Mr. Marble and the Commissioners, whose advance agents have been seen in both markets.

Governor Deneen has managed to find a railroad commissioner in the person of W. H. Boys to take the place of the late Commissioner Neville. Can't he now take another long pull at his belt-strap and find a third man who can do something for his salary besides drawing his breath?

There was considerable interest displayed on change at St. Louis on November 12, being the occasion of the vote on the proposed change in the rules to admit of going back to the delivery of red winter only, on contract. The total vote was 618, but as it required a two-thirds vote to effect the change, the proposed movement was lost and matters in this respect remain as heretofore.

Judge Lochren, at Minneapolis, in his charge to the grand jury, which returned a number of indictments for rebating, has added a clause to it which clarifies the definition of "rebating." He said: "Rebating is not merely giving back money, but the giving of any favor or consideration to one person which is withheld from another." Thus the standard of railroad ethics is raised another notch.

Mr. McCotter's suggestions on mutual insurance laws, on another page, were perhaps intended for the editor's eye only, but they will be so useful to grain men in Oklahoma, if they take heed of their import, that they are here published for the purpose of getting them into dealers' hands. The opportunity offered by the constitutional convention should not be lost by those people, who ought to press the information upon their representatives and demand their action thereon.

The farm papers in the Northwest which are complaining of the "exaggerated crop reports" say they are due to two motives, both "dishonorable": (1) The hope of affecting prices; and (2) the desire of local papers to increase their own advertising patronage on the score that farmers are able to buy freely. Perhaps. But two other motives are not referred to, to wit: (1) The desire of every farmer to equal the success of his neighbor as a farmer; especially if (2) he desires to sell his farm, or, if dabbling in real estate, to boom the country.

Farmers are pretty good bulls and bears themselves; it's only the farm papers that try to impress their readers with the idea that they are chumps.

After the clerks had begun to rob the Pittsburgh Trust Co. to bet on stocks, the police arrested—the clerks; but the shoppers are still at large angling for suckers. Why is it Congress does not take a hand and kill this infamous business and have an end to it along with the lotteries?

Mr. Carr, the "farmer's friend," as he likes to style himself, told the Commerce Commission that the difficulties farmers encountered in getting cars had greatly injured his business. Now, honest, Mr. Carr, was it this or the fact that your rivals among the commission houses have organized your whilom customers as co-operative companies and left you out in the damp, disagreeable world?

The opening of public elevators after the manner of the Santa Fe at Chicago, Burlington at Kansas City and Illinois Central at New Orleans will do much to break the grain blockades in those cities, since the roads will have control of their own terminals and will take good care to release their own equipment, both to get the cars and to earn elevator fees on the grain going through the houses.

The Grain Dealers' National Association has printed in a convenient pamphlet the speeches by Messrs. Eckels, Calhoun and Blackstock, delivered at the banquet given to the Association in June last. The speeches created so much interest at the time, and are so permanent in character, the issues they discussed being still live ones, likely to remain such for some time to come, that their publication in this form is a public service.

The fact that there are now and always have been men in the United States Senate who have done worse things than Burton of Kansas without coming to grief or being called to account, should not affect opinion of the righteousness of the latter's sentence to a Missouri jail. A man who has gumption enough to break into the United States Senate ought to go to jail if the dignity of the office cannot lift him above consorting with common swindlers.

Secretary McCreery of the Illinois bunch of co-operative elevators is forced to admit that commission men will handle their grain and that railroads will carry it as promptly as for other shippers; but he "thinks" bidders do not bid as much for farmers' grain as for others; nor does farmers' consigned grain bring as much as others. Mr. McCreery having, like Mr. Meserole, his colleague in Iowa, failed to show the Commerce Commission that the farmers' elevators were in any wise discriminated against in the grain markets, had to strain a point and "think." Mr. McCreery ought to think again; for he, of course, knows that when under oath "thinking" doesn't count either way; and he did not know that there

had been the discrimination complained of or he could have cited cases.

It is announced from New Orleans that the Board of Trade will assume control of the weighing of grain at the three elevators of the Illinois Central Railroad in that city, the bureau to be under the direction of W. L. Richeson, chief inspector. This step will insure shippers full credit for all the grain that arrives there and give them the record service upon the condition of cars on arrival that is usual now in all first-class grain markets.

Hitherto the terminal elevators of the C. P. Railway in Canada (12,000,000 bushels' capacity) have been operated by that road for the use and benefit of the public, but now, so it is announced, negotiations are in progress to lease them to a private company. Those of the C. N. Railway are already so leased. Well, the independent grain buyers of Canada will have the sincerest sympathy of their collaborators on this side the line "in this their hour," etc.

Our attention has been called to a misstatement of fact in an article in the October issue on page 195, where it is said that Minneapolis had adopted the "call to arrive" system and applied it to wheat. A proposition to change the rules in that market to establish such a call was indeed talked of by a few; but it aroused so much opposition that it never came to a vote and has been indefinitely postponed. Track bids are therefore made there in the same old way—"every man bidding what he wants to bid," as they say in Chicago, and not as they used to do it in Kansas City—"up to a year ago."

The Indiana Railroad Commission has formulated rules governing demurrage in that state, which are reciprocal in character, and which are in substance as follows: 24 hours allowed for notification; free time of 48 hours; \$1 per day demurrage. Per contra, if cars are bunched on a shipper, he is to be allowed free time as indicated by his applications for cars; also credit for switching delays and weather in which it is impossible to load and legal holidays; to get which credits, however, the shipper must be prepared to make affidavit as to the conditions complained of. The rules are very fairly drawn and should be mutually beneficial and satisfactory.

An article on the "Independent Grain Dealer" is republished from the "Commercial West" just as a "matter of interest." It is a paper entirely characteristic of the "Commercial West," which "dearly loves a lord," and has quite positive notions of the inerrancy of Northwestern railroads. And so Mr. McHugh, noting "the firmness with which the independent shipper of grain from single elevators or small companies has maintained his relative standing while great elevator companies have grown up all around him, attributes this to the unvarying equality of railroad rates to large and small shippers, and the sound policy and practice of the Minneapolis Chamber of Commerce in giving the same facilities and equal

treatment to both." As to the last, we make no doubt; but otherwise it is unfortunate that the federal grand jury got down to business just as we had put the article in type—the indictments have somewhat "queered it."

The financing of a big company in New York to make denatured alcohol gives color to the rumors that the distillery crowd or Standard Oil, or both of them, are getting ready to control that business. Of course, the fact that there must be certain supervision of the industry by the Government, to prevent fraudulent production of high wines, will facilitate its concentration in a comparatively few hands, because the expense attached to supervision would be as great for a comparatively large business as for a small one; and eventually the denatured alcohol will undoubtedly be made on so small a margin that the "little fish" won't be in it long.

It all depends on the "ownership of the hoss." Now, when grain dealers associate for mutual benefit in a variety of ways, their association is immediately branded a "trust," an engine to "fix prices" and all that sort of twaddle; but when the Farmers' Co-operative Business Congress gets together to devise ways and means to "fix prices" and the rest, it is different. They say:

Our purpose of calling this kind of a meeting is to more closely unite the agricultural interests of the West and South. It is not our intention to organize a trust of farmers. It has been said that we purpose to increase the price of wheat a stated amount. This we intend to do, but not by organizing and demanding that the consumers pay that for our produce. If we can sell our products to the Southern associations at a higher price than we receive from the middlemen and can enable the Southern producers to hold their product we will work out a plan whereby the price of farm products will naturally work higher.

The author of that statement of "benevolent purpose" could readily split a hair "'twixt west and northwest sides" and not half try. The Society of Equity doesn't even equivocate. It frankly says it is out for the stuff, and if it can hold up the consumer it proposes to do it, and do it plenty, but it is not denounced by the watch-dogs of the press—not even ridiculed.

It is unquestionably true that, as a market letter says: "In no other line of business would such car congestion as frequently exists in the grain trade be tolerated." The Oregonian in a cartoon, reproduced on another page, hits off one phase of the situation. The under-officers may be doing what they can to relieve congestion, but with the magnates warring for control, the operation of the roads must in a measure wait on occasion. The public has been very patient, shippers and consumers alike suffering; but such action as that at Buffalo, where the roads simply refused to handle grain while higher classification freight was moving, has driven members of the New York Produce Exchange almost to "the point of seeking a legal solution of this tangle, which in the last two or three years shows evidence of becoming a habit." The remedy, if it should come about in that way, would be the inauguration of an era of railroad improvement. We have had that of building and

more or less that of combination; but now the cry of the public is for improved facilities; and "since the present situation points to a marked deficiency in equipment it would seem but right," says the Market Record, "that extreme efforts along this line were due the public."

H. I. Baldwin & Co. post conspicuously in their office at Decatur a notice reading as follows:

CHANGED CONDITIONS.

The last crop of corn was of a quality requiring but little care on the part of the farmer or dealer to put it in safe condition for market, but early returns from shuckers this year show an unusual amount of

DAMAGED, ROTTEN EARS.

We wish to warn our customers that they must see to it that this rotten corn is picked out before it is sent to market, as there will no doubt be a wide discount in all markets on corn containing rotten grains.

Both dealers and farmers are usually too sanguine of the quality of corn marketed in the fall and winter; and this sort of a notice universally lived up to would doubtless insure better grain.

Secretary Wells of Iowa is furnishing his people with blanks called, "Grain Dealers' Order for Cars." It is simply a form of written order to be made in duplicate and filed with the station agent, asking for a certain exact number of cars, to be shipped to a named destination by a named route. This order will be signed (and acknowledgment of its receipt should be made thereon by the station agent). Below the order are blank spaces for date and description of cars as received on the order. The blank is an admirable idea, and its use will not merely systematize the dealers' business in an important particular, but will act automatically for the accumulation of valuable evidence to protect the dealer in case it is necessary to prefer claims.

Mr. Marble, who conducted the inquisition at Kansas City as special attorney of the Commerce Commission, doubtless means well; but he seems to labor somewhat under the handicap of having started out with a theory to prove rather than with a view to uncovering what he might find and accepting it at its value. Nor is he as familiar as he might be with technical details of the trade. On no other theory can one explain the faux pas of introducing the witness Beall of the National Elevator Co. at Kansas City. As the bluff of that gigantic bucket-shop, the National Board of Trade, Mr. Beall, who no doubt literally spoke the truth, but with proper coloring, could be expected to find for Mr. Marble almost anything the latter could expect or desire. Now, of course, if the witness were giving state's evidence, Mr. Marble might be excused from calling one whose principal business connection is a gambling concern; but there was no pretense of that; so that Mr. Marble simply gave prestige and a color of respectability to a concern that is doing a business that ought to be suppressed as a public nuisance, like any other gambling house, great or small. The episode discredits to some extent the entire record of the investigation.

TRADE NOTES

The firm name of N. H. Adams & Son, seed dealers of Decorah, Iowa, has been changed to the Adams Seed Co.

N. A. Grabill, the well-known elevator builder of Daleville, Ind., is very busy on contracts. His specialty is modern country elevators, and judging from the amount of business he is doing his work is satisfactory to the trade.

The Hess Warming & Ventilating Co. reports a good inquiry for the new "Ideal" Grain Drier. Among recent shipments are machines of this design to Brand-Dunwoody Milling Co., Joplin, Mo.; Chickasha Milling Co., Chickasha, I. T.; Union Grain & Coal Co., Anderson, Ind., and F. E. Horton, Ashtabula, Ohio. Its use on small lots of grain is profitable and it fills the "long-felt want" of an inexpensive drier for country elevators, mills, etc.

With the election of T. W. Snow as president of the Otto Gas Engine Works, Philadelphia, it is announced that plans for a largely increased business will be carried out. It is proposed to materially increase the capacity of the Philadelphia plant and also to build a new plant at or near Chicago, to care for the railway specialty business which the company is developing. Mr. Snow's experience has been such as to qualify him for the carrying out of large undertakings and the success of the company under his leadership is assured.

Users of elevating and power-transmitting machinery should write the Minneapolis Steel & Machinery Co. for a copy of their catalogue devoted to this class of equipment. It is one of the most complete of its kind and lists everything in this line needed in the modern elevator or mill. The company also has a special booklet describing the Munzel Gas Engine and Producer, which will be sent to dealers who write for it. The company has the exclusive right to manufacture this producer and engine in this country and is prepared to make reasonable delivery of plants from 25 to 300 horsepower and guarantee a substantial saving in the cost of power.

The fire which damaged the foundry of H. W. Caldwell & Son Co. at Western Avenue and Seventeenth Street, Chicago, on the night of October 15, was not so serious as first reported. The blaze was confined to the structure in which it originated and even this was not entirely destroyed. Inspection on the following day showed that the walls of the building were mainly intact and the cupola unharmed, while the blower was all right and the large crane seemed to be in good shape. The company promptly made arrangements for taking care of their immediate needs in castings, filling all orders promptly, and announced that they expected to be molding on their own floors again within two weeks.

The many friends of C. B. Jenkins of Marion, Ohio, will wish him an unqualified success in the new business in which he engaged on November 1. On that date he retired from the Marion Milling & Grain Co. of Marion, Ohio, to complete the organization of the State Millers' Mutual Fire Insurance Co. Mr. Jenkins has also opened an office for the sale of flour mill and elevator properties on a brokerage basis under the style of the Buckeye Brokerage Co. In his new ventures Mr. Jenkins expects to devote a great deal of time to association work and will try to keep Ohio in the front as association territory. He has been prominently identified with the milling and grain trade of Ohio since engaging with the Marion company some twelve years ago and has served as president of the Ohio Grain Dealers' Association, was the first president of the Ohio Shippers' Association and at the present time is secretary of the Ohio State Millers' Association. With a large acquaintance, with the confidence of the entire milling and

grain trade of the state, Mr. Jenkins' wave of prosperity should be both early in arriving and permanent.

The N. P. Bowsher Company of South Bend, Ind., is stacking up liberal supplies of iron, coke, coal and lumber to insure steady operations during the period of irregular deliveries in the winter. On account of the short hay crop and abundant corn harvest the grinding of feed is already being greatly stimulated, particularly the grinding of ear corn, as the ground cob supplies roughage. On this work the Bowsher Mills are claimed to be especially efficient. The Bowsher Company report shipments, both carload and local, for September and October as the heaviest in their history.

The Joseph Dixon Crucible Co., Jersey City, N. J., publish a very interesting pamphlet on the subject of steam traps. It is an illustrated description of the several varieties, with valuable suggestions by W. H. Wakeman, expert steam engineer and author of well-known books on steam engineering. Some steam users seem to think that a steam trap is only a luxury to be enjoyed by those who have expensive plants in operation and wish to show many extra appliances which might be dispensed with and not be missed. This is a great mistake, as a trap is valuable according to the cost of fuel that must be burned to make the steam. Certain it is that this pamphlet is well worth most careful reading, for it is instructive as well as interesting.

The Straub Machinery Co. of Cincinnati, Ohio, has filed articles of incorporation, with a capital stock of \$300,000, and plans to materially enlarge its manufacturing facilities. A new factory will be erected in Cumminsville, a suburb of Cincinnati, and the number of men employed will be increased from 100 to about 400. The new plant will cover about four acres. The ground has been purchased and work on the construction of the buildings will be commenced next spring. A machine shop 500 feet long and a foundry 200 feet long will be built. A power plant for the production of electricity, which will operate the works, will also be erected. Railroad switches will be built into the plant from the nearby railroads. Orville Simpson is president and one of the incorporators. The others are Lewis Hallen, E. H. Spooner, Paul Macher and Frederick Gerton.

In the purchase of an attrition mill it is well to keep in mind the special kind of work that is intended to be done. Then, again, the mechanical construction, simplicity and durability of the mill should be studied intelligently. Often we hear an intending purchaser say: "I would like very much to see how the mill grinds ear corn, chop feed, bran, offal, small grains, cracked corn, etc. If I could only see the real product as this mill that I am thinking of buying does the work, then I would be in a better position to buy." The Foos Manufacturing Co. of Springfield, Ohio, encourage not only the careful study of their mills, but also gladly send samples of work, as the "Scientific" does it. Ever since 1878—twenty-eight years—these people have made feed milling a study. A successful study, too, because they have "made good." Their mills are simple in construction, stand the racket and do the work. There is not a single feed product for which a Scientific mill cannot be found to do the work in the most approved manner.

C. A. King & Co., Toledo, Ohio, say the rye crop of the world averages about half as much as either the wheat or corn crop, which this year will total about 1,500,000,000 bushels, an average but a trifle less than last year. Russia raises about half of this, Germany another quarter which it consumes with part of the Russian crop. Austria-Hungary produces 130,000,000 bushels, France 55,000,000 bushels, and the United States 28,000,000 bushels. Pennsylvania leads the states with 5,000,000 bushels, Wisconsin is second and Michigan a close third. The rye disappears as rye bread and whiskey.

SULPHUR DIOXIDE AS AN INSECTICIDE.

Referring to the issues of the "American Elevator and Grain Trade" for August, at page 70, and September, at page 133, the reader will find a statement of the effects upon grain of sulphur fumigation, as practiced abroad by steamship companies for disinfecting ships and the destruction of vermin in their holds or cargoes. The experiments there reported indicated very clearly that the effect upon wheat (and its product, flour) was damaging in the extreme, being practically destructive of the gluten, or, in other words, the strength of the wheat or the flour. Upon corn (maize) and barley the effect of a single, or slight, fumigation, was declared by the London Local Government Board's examiner to be "negligible" so far as it related to their "germinating power and commercial value."

Somewhat similar conclusions have been reached by a series of tests conducted by the Bureau of Entomology, as reported by C. L. Marlatt in Bulletin No. 60, in which, in the "summary of results," it is said:

The germinating power of grass, grain and common garden seeds is quickly destroyed with even weak applications of the gas, and its employment is therefore impracticable for all seeds for planting. It does not, however, injure the feeding value or cooking quality of cereals, and the odor of the gas passes away fairly quickly and is not retained except where the grain or seeds are moist.

The gas will, of course, kill all free insects after an exposure of a few minutes to a low percentage of gas; but insects enclosed in seeds or grain require a 1 to 5 per cent percentage of gas and exposure of 12 to 24 hours.

The penetration of a low percentage of gas (5 or 6 per cent), without pressure from above, into exposed surfaces of grain is not very great; but a strong percentage (15 per cent) under high pressure for an hour or more has strong penetration to a depth of from 14 to 18 inches even where a comparatively small area for penetration is allowed. It should be noted here, also, that in the ordinary method of fumigating grains with the Clayton apparatus the gas is liberated through a perforated iron tube thrust into the bottom of the bin, and the gas forced in under pressure is made to permeate much more quickly and thoroughly the entire mass of grain.

The general results of these experiments seem to show that this gas has a very great value for the uses in which it is now employed, namely, the disinfection of vessels and cargoes of grain. Here all conditions are exceptionally favorable. The vessel furnished a comparatively airtight fumigating receptacle, and the gas is forced into it by circulation at first, and finally under pressure, and made to reach every portion of the vessel. The grain thus disinfected is practically always for consumption and not for planting, hence the effect on germination is comparatively immaterial. It seems probable, also, that it may be very useful in a similar way in elevators and flouring mills, eliminating the risk of fire and explosion.

The Clayton Gas is nothing more than the sulphur dioxide and trioxide; that is the same mixture which is obtained by burning ordinary stick sulphur or sulphur candles. The sulphur is burned on a grate, developing a temperature of 700 to 1,000 degrees F., which is cooled down to 70 to 100 degrees before going into use. No flowers of sulphur are permitted to carry over to mix with the commodity under fumigation.

The crop of spelt in South Dakota for the past season is estimated at 4,538,708 bushels.

The first car of new corn reached Chicago on October 15, was from Iroquois County, Ill. It was No Grade and sold at 39 cents local freight basis.

Several cars loaded with wheat were broken up in a freight train wreck on the St. Paul railroad near Mina, S. D., on October 10. Spreading rails caused the engine to leave the track while crossing a bridge over Snake Creek and five cars plunged through the structure, demolishing it and scattering the grain about the ravine.

RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain, etc., at leading receiving and shipping points in the United States for the month of October, 1906:

BALTIMORE—Reported by H. A. Wroth, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1906.	1905.	1906.	1905.
Wheat, bushels.....	592,899	520,058	652,059	188,742
Corn, bushels.....	1,511,791	517,190	989,514	399,232
Oats, bushels.....	629,972	2,283,524	230	1,217,551
Barley, bushels.....		729		
Malt, bushels.....				
Rye, bushels.....	119,151	185,114		60,000
Timothy Seed, lbs.....		12,011		
Clover Seed, lbs.....	621	4,338	584	
Hay, tons.....	6,620	5,712	1,514	2,040
Straw, tons.....				
Flour, bbls.....	312,753	314,770	185,085	210,167
Mill feed, tons.....				

BOSTON—Reported by Daniel D. Morris, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1906.	1905.	1906.	1905.
Flour, bbls.....	197,903	214,968	53,873	70,120
Wheat, bushels.....	1,152,630	1,172,800	573,225	813,151
Corn, bushels.....	321,300	369,331	263,272	475,712
Oats, bushels.....	435,626	753,480	380	206,069
Barley, bushels.....	3,047			
Flax Seed, bushels.....	48,556	329,105	24,880	216,307
Mill feed, tons.....	1,043	1,462	55	73
Cornmeal, bbls.....	3,870	1,607	1,253	1,060
Oatmeal, bbls.....	15,525	11,582	5,511	2,720
Oatmeal, sacks.....	14,120	9,230	11,646	23,204
Hay, tons.....	12,320	18,570	149	2,942

BUFFALO—Reported by F. Howard Mason, secretary of the Chamber of Commerce. Opening April 17 to 30.

Articles.	Receipts.		Shipments.	
	1906.	1905.	1906.	1905.
Wheat, bushels.....	10,319,816	9,459,888		
Corn, bushels.....	3,438,270	3,471,590		
Oats, bushels.....	2,102,000	3,725,685		
Barley, bushels.....	2,949,100	5,163,123		
Rye, bushels.....	155,000	210,000		
Timothy Seed, lbs.....				
Clover Seed, lbs.....				
Other Grass Seed, lbs.....	1,891,625	2,987,874		
Flax Seed, bushels.....				
Broom Corn, lbs.....				
Hay, tons.....	7,631,787	6,948,407		
Flour, bbls.....				

Canal did not open until May 2.

CHICAGO—Reported by Geo. F. Stone, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1906.	1905.	1906.	1905.
Wheat, bushels.....	2,529,248	3,160,880	1,275,748	782,987
Corn, bushels.....	9,006,016	5,012,238	7,247,171	6,194,074
Oats, bushels.....	1,956,181	14,012,888	8,127,541	8,413,229
Barley, bushels.....	3,652,646	4,855,600	1,043,261	1,312,899
Rye, bushels.....	361,698	434,180	163,233	189,427
Timothy Seed, lbs.....	1,848,567	9,026,897	1,415,690	1,084,911
Clover Seed, lbs.....	1,007,768	1,708,000	181,481	154,096
Other Grass Seed, lbs.....	2,237,748	3,097,416	7,730,660	3,321,848
Flax Seed, bushels.....	389,691	342,200	53,211	8,360
Broom Corn, lbs.....	4,344,561	4,557,265	1,644,660	1,055,346
Hay, tons.....	27,279	14,498	2,526	958
Flour, bbls.....	881,604	921,476	897,000	1,032,306

CINCINNATI—Reported by C. B. Murray, superintendent of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1906.	1905.	1906.	1905.
Wheat, bushels.....	214,684	385,394	135,396	324,727
Corn, bushels.....	687,478	409,416	380,202	146,026
Oats, bushels.....	755,832	904,564	236,976	690,805
Barley, bushels.....	119,092	135,090		193
Malt, bushels.....	150,130	108,025	40,408	27,272
Rye, bushels.....	101,441	58,358	10,424	4,458
Timothy Seed, bags.....	43	4,896	4,982	2,699
Clover Seed, bags.....	7,804	2,986	928	420
Other Grass Seed, bags.....	8,984	13,950	8,192	12,458
Hay, tons.....	14,712	12,728	8,924	6,808
Flour, bbls.....	159,089	150,693	70,085	88,120

CLEVELAND—Reported by M. A. Havens, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1906.	1905.	1906.	1905.
Wheat, bushels, water.....	112,575	131,147		
Do rail.....	84,183	134,708		
Corn, bushels.....	57,017	354,708	332,585	232,999
Oats, bushels, water.....				500
Do rail.....	709,730	1,549,296	278,479	393,654
Barley, bushels, water.....	84,500	95,000		
Do rail.....	15,331	10,165		
Rye.....		750	785	
Flax Seed, bushels, water.....	172,000	108,000		
Do rail.....				
Hay, tons.....	6,556	3,971	508	798
Flour, tons, water.....				
Do rail.....	7,363	6,238	3,753	2,323

DETROIT—Reported by F. W. Waring, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1906.	1905.	1906.	1905.
Wheat, bushels.....	121,172	395,364	20,587	77,773
Corn, bushels.....	385,785	598,231	43,897	74,575
Oats, bushels.....	345,598	333,622	45,475	92,127
Barley, bushels.....	179,005	630,591		920
Rye, bushels.....	70,606	122,719	102,613	68,400
Flour, bbls.....	12,500	38,100	6,400	15,000

DULUTH—Reported by H. B. Moore, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1906.	1905.	1906.	1905.
Wheat, bushels.....	9,906,931	8,345,270	8,703,957	6,557,803
Corn, bushels.....	22,595	32,196	31,182	35,420
Oats, bushels.....	1,146,975	2,448,336	704,043	704,043
Barley, bushels.....	2,332,333	3,063,333	1,905,088	3,546,543
Rye, bushels.....	160,228	153,917	196,171	121,448
Flax Seed, bushels.....	4,737,418	3,612,637	3,848,945	2,754,808
Flour, bbls.....	939,750	948,000	811,110	874,000

KANSAS CITY—Reported by E. D. Bigelow, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1906.	1905.	1906.	1905.
Wheat, bushels.....	5,209,000	5,638,000	3,595,000	3,324,000
Corn, bushels.....	938,000	1,383,000	668,000	933,000
Oats, bushels.....	712,500	667,500	603,000	496,500
Barley, bushels.....	42,000	197,000	15,000	143,000
Rye, bushels.....	40,000	54,000	12,000	35,000
Flax Seed, bushels.....	12,000		2,400	
Straw, tons.....	1,785	1,095	5,610	4,500
Hay, tons.....	7,900	12,910	4,610	2,140
Flour, bbls.....			174,400	162,000

GALVESTON—Reported by C. McD. Robinson, chief inspector of the Cotton Exchange and Board of Trade.

Articles.	Receipts.		Shipments.	
	1906.	1905.	1906.	1905.
Wheat, bushels.....			1,894,137	616,320
Corn, bushels.....			83,673	117,188
Oats.....			50,860	
Barley, bushels.....				

MILWAUKEE—Reported by Wm. J. Langson, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1906.	1905.	1906.	1905.
Wheat, bushels.....	1,302,416	1,282,260	622,507	336,420
Corn, bushels.....	239,400	104,250	105,860	91,671
Oats, bushels.....	1,486,800	1,360,240	99,592	869,041
Barley, bushels.....	2,773,300	3,802,800	1,614,846	2,420,536
Rye, bushels.....	172,000	177,600	122,015	29,000
Timothy Seed, lbs.....	289,460	269,091	350,840	118,000
Clover Seed, lbs.....	1,184,692	528,940	429,285	32,000
Flax Seed, bushels.....	38,100	48,700		
Hay, tons.....	2,544	2,040	72	
Flour, bbls.....	393,957	467,650	382,827	484,527

MINNEAPOLIS—Reported by L. F. Jamme, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1906.	1905.	1906.	1905.
Wheat, bushels.....	9,823,190	14,752,130	2,303,760	2,206,150
Corn, bushels.....	204,990	131,390	48,930	25,610
Oats, bushels.....	3,238,490	4,453,600	1,797,060	1,267,160
Barley, bushels.....	1,556,710	2,470,170	1,198,300	1,251,530
Rye, bushels.....	273,980	313,060	210,510	173,060
Flax Seed, bushels.....	1,573,460	2,066,230	863,500	468,910
Hay, tons.....	2,229	2,220	50	91
Flour, bbls.....	23,152	24,287	1,593,097	2,054,277

MONTREAL—Reported by George Hadrill, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1906.	1905.	1906.	1905.
Wheat, bushels.....	2,498,971	3,018,257	1,827,219	1,609,902
Corn, bushels.....	1,132,565	2,972,121	978,088	294,784
Oats, bushels.....	225,467	507,124	245,281	448,689
Barley, bushels.....	140,718	537,540	95,624	709,000
Rye, bushels.....				
Flax Seed, bushels.....	250,508		242,030	
Flour, barrels.....	120,116	146,851	140,537	199,213

NEW ORLEANS—Reported by H. S. Herring, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1906.	1905.	1906.	1905.
Wheat, bushels.....	584,000	96,000	1,026,712	219,000
Corn, bushels.....	970,000	370,000	805,553	201,141
Oats, bushels.....	410,400	227,000	142,165	181,490
Barley, bushels.....				
Rough rice.....				
Clean rice pockets.....				
Hay, bales.....	20,729		17,424	
*Flour, bbls.....	46,014	52,395	149,100	101,671

*Through consignments of flour to Europe not included in receipts.

OMAHA—Reported by Edward J. McVann, secretary of the Grain Exchange.

Articles.	Receipts.		Shipments.	
	1906.	1905.	1906.	1905.
Wheat, bu.....	1,281,600	1,397,000	857,000	1,125,600
Corn, bu.....	1,377,200	530,000	1,181,000	809,600
Oats, bu.....	2,580,000	1,465,500	2,034,000	931,500
Barley, bu.....	28,000	41,000	5,000	27,000
Rye, bu.....	23,000	40,000	15,000	27,000

PHILADELPHIA—Reported by L. J. Logan, secretary of the Commercial Exchange.

Articles.	Receipts.		Shipments.	
	1906.	1905.	1906.	1905.
Wheat, bushels.....	742,822	354,683	493,377	12,000
Corn, bushels.....	740,900	473,332	608,570	307,882
Oats, bushels.....	538,223	1,711,152		510,000
Barley, bushels.....	21,000	51,200		
Rye, bushels.....	12,000	16,000		
Timothy Seed, bags.....	812	1,231		
Clover Seed, bags.....	831	578		
Flax Seed, bushels.....	70,000	45,600		
Hay, tons.....	8,281	8,540		
Flour, bbls.....	409,886	351,663	189,020	128,758

ST. LOUIS—Reported by Geo. H. Morgan, secretary of the Merchants' Exchange.

Wheat, bushels.....	1,851,000	2,185,000	1,499,795	1,488,820
" sacks.....	17,988	14,014	1,180	1,340
Corn, bushels.....	2,382,600	1,502,000	1,620,091	1,361,281
" sacks.....	882	2,364	15,470	20,971
Oats, bushels.....	1,476,800	2,249,100	2,015,190	1,285,589
" sacks.....	12	8	8,360	3,610
Barley, bushels.....	677,300	643,750	20,755	21,010
" sacks.....			131	
Rye, bushels.....	58,000	69,006		
" sacks.....	52	784	7,753	6,175
Hay, bales.....	25,418	18,715	6,753	6,175
Flour, bbls.....	286,935	254,375	303,890	360,110

ELEVATOR AND GRAIN NEWS

ILLINOIS.

J. J. Hayward may secure the Wykle Elevator at Mahomet, Ill.

A Farmers' Elevator Co. is contemplating an elevator at Ohio, Ill.

There is a movement on foot for a farmers' elevator at Mansfield, Ill.

The Ricketts & Miles' elevator at Fisher, Ill., is nearing completion.

A corn crib 100x12 feet and 20 feet high is being built at St. Joseph, Ill.

J. T. Sims of Frankfort, Ind., has acquired an elevator at Oakland, Ill.

Repairs are being made on the Rodgers Grain Co.'s Elevators at Griswold, Ill.

The L. R. Smith Co. of Sullivan, Ill., takes the name of the Sullivan Elevator Co.

A. W. Williamson of Saunemin, Ill., has sold his elevator to a Mr. Conn of Rantoul.

Emerson Hartsock will rebuild his elevator at Lane, Ill., recently destroyed by fire.

Elevators are being built at Naples, Ill., by the Smith Hippin Co. and the Loelado Co.

The Farmers' Grain Co. at Stonington, Ill., have purchased the Mansfield Co.'s Elevator for \$12,000.

Recently the Ridge Grain & Elevator Co. of Ridge, Ill., ordered a 30-horsepower gasoline engine.

The Bryce Farmers' Grain Company of Bryce, Ill., has been incorporated with a capital of \$8,500.

J. P. Garber has bought N. R. Moore's elevators at Roanoke, Ill., for \$12,000 and takes possession May 1.

Repairs are being made on the Evans Elevator at Radford, Ill., which include a new engine and a driveway.

Timmins & Hawkins of Otterbein, Ind., recently paid \$11,000 for Langellier Bros.' elevator at Dawson Park, Ill.

Fred Davidson of Sterling, Ill., is equipping his elevator with an electric motor. It will be located in the cupola.

A new and modern elevator will be erected on the site of the C. & E. I. elevator recently burned at Tuscola, Ill.

The Bryce Farmers' Elevator Co. has purchased the J. B. Wilson Elevator at Bryce, Ill., for the consideration of \$8,500.

Osborne & Baird, grain dealers of Seville, Ill., have dissolved. Mr. Osborne will conduct the business alone, in the future.

A. L. Clark & Co. of Ashton, Ill., recently sold their elevator to O. C. Baker of Scranton, Iowa, who has taken possession.

J. H. and H. M. Taggart of Wenona, Ill., dealers in grain, have dissolved partnership. H. M. Taggart will continue the business.

A. K. Sills of Indianapolis, Ind., has purchased the elevator at Secor, Ill., owned by P. A. Felter, but does not take possession until March 1.

The Princeton Elevator Co. of Princeton, Ind., has filed incorporation papers in Illinois showing its business at Mt. Carmel is valued at \$5,700.

The new elevator just completed for Maus & Son at Latham, Ill., makes the third for that place. The Burrell Engine & Construction Co. had the contract.

It is reported the Pontiac Farmers' Grain Co. has been unable to secure the Rogers' Elevator at Pontiac and negotiations are now on for the Ayrarn Elevator.

Jake Puterbaugh recently purchased the Steiner Elevator at Mackinaw, Ill., and is now the only grain dealer there. He paid H. B. Neff of Peoria \$5,150 for the property.

The Harvel Grain, Hay and Supply Co. of Harvel, Ill., has been incorporated with a capital stock of \$14,000. Those interested are: E. W. Bockenwitz, T. S. Edwards and Daniel Pope.

Hill Bros. & Crow, who have operated a plant at Blue Mound, Ill., have given way to the firm of E. W. Crow & Co. Hill Bros. are in possession of the plant formerly conducted by Willeys, Raymond & Stonington.

Charles E. Drew and a Mr. Hargreaves of Dwight, Ill., forming the firm of Hargreaves & Drew, have purchased the R. D. Fuller Elevators at Gardner and South Wilmington to add to their elevators at Cullom and Manhattan. Mr. Drew will take charge of the plant at Gardner, while his son, Cyrus

Drew, will look after the other one. Mr. Fuller retires after twelve years in the grain business. The new owners retain Peter Axland in their employ.

Davis & Davis are building a 20,000-bushel grain elevator on the C. & E. I. right-of-way at Arthur, Ill. They already own a 75,000-bushel elevator and an ear-corn dump with a capacity of 50,000 bushels.

Masters & Fuller, grain dealers at Piasa and Fidelity, Ill., have sold their grain elevator at the latter place to J. T. Darnielle of Upper Alton, who formerly was in the grain business at Piasa. He was given possession November 1.

Archie Applegate of Atlanta, Ill., and a Mr. King of Carlock have purchased the grain business formerly conducted by Ward & Murphy at Atlanta, Ill., as well as at Mount Joy. They also acquired the business of Quigg & Tanner at these places, where they have been for twenty-one years.

The D. Rothschild Grain Co. of Davenport, Iowa, has bought from the American Maltng Co. the malt house and grain elevator at Colehour for between \$80,000 and \$90,000. The site comprises what would be equivalent to about thirty lots. The elevator has a capacity of between 400,000 and 500,000 bushels.

For the consideration of \$6,750 the Monticello Grain Co. of Monticello, Ill., has purchased the Illinois Central Elevator belonging to the Knight Grain Co. It has a capacity of 30,000 bushels. The attorneys for both the Monticello Grain Co. and the Knight Grain Co. are preparing to take their recent suit to a higher court. No reference to this litigation is made in the contract for the transfer of the elevator but the intimation is that all litigation will be dropped.

Jeter & Boston have purchased the elevator property at Yorkville, Ill., which they have been operating under lease, from F. W. Lord of Plano. An addition 20 feet long will be built on the west side of the present building and the whole raised to a greater height. A cupola will be erected and all the grain before loading will be carried to the top of this, with a car loading spout. A cement foundation will be put under the whole building and the roadway from the office cut down several feet.

A deed transferring an elevator in Princeville, Ill., from R. W. Van Tassell to Richard Cox for the consideration of \$7,000 was filed at Peoria recently. It recalls a lawsuit which was carried into court when the elevator was awarded to Van Tassell after it had been sold to other parties. Years ago Van Tassell sold to Best & Wakefield the land on which the elevator stood, with a contract that they were never to engage in the elevator business. In a few years they did engage in business and Van Tassell brought suit and was given possession of the elevator. Best & Wakefield became bankrupt and in the mass of legal complications that followed the case went to the Supreme Court of the United States and back and is still unsettled.

MISSOURI, KANSAS AND NEBRASKA.

A Mr. Hord will build an elevator at Stromsburg, Neb.

A farmers' elevator is contemplated at Central City, Neb.

Luther Cortelyou has sold out his grain business at Muscotah, Kan.

A new elevator will be erected in the near future at Polk, Neb.

W. H. Fluke of Gardner, Kan., is building an addition to his elevator.

The Leland Elevator Co. contemplate an elevator at Stromsburg, Neb.

G. W. Venner succeeds Frazier & Conrad in the grain business at Bern, Kan.

Bell Bros. of Halls Summit, Kan., have moved their grain business to Waverly.

W. T. Fried has his new elevator at Beemer, Neb., completed and in operation.

R. M. Church has succeeded Durr & Church in the grain business at Altamont, Kan.

It is reported the H. H. Bartling Elevator at Julian, Neb., has closed down indefinitely.

A farmers' elevator company is being formed among the farmers about Nebraska City, Neb.

Butterfield & Son have leased the Updike Elevator at Norfolk, Neb., for private grain storage.

The Barker Grain Co. has succeeded I. M. Baker & Co. in the grain business at Everton, Mo.

The Farmers' Grain Co. has been incorporated at Calumet, Mo., with a capitalization of \$2,000.

The Bluff City Grain & Feed Co. of Bluff City, Kan., is a new incorporation, with a capital stock of \$7,000.

Burglars broke into the office of the East Elevator Co. at Bradshaw, Neb., on the night of October 13, and secured a small amount of money.

Bloodhounds were placed upon the trail of the robbers.

The Hayes-Eames new elevator at Rockford, Neb., which replaces the one destroyed by fire, is in operation.

The new Hoffman elevator at Arlington, Kan., which replaces the one that burned, is nearly ready for occupancy.

It is understood the Lexington Elevator Co. contemplates a new elevator at Polk, Neb., to be erected soon.

An elevator will be erected in the new town on the Union Pacific Railroad, located in Center Township, near Blue Rapids, Kan.

The Farmers' Milling & Elevator Co. of Norton, Kan., have incorporated for \$50,000, and is contemplating extensive improvements.

An elevator of 8,500 bushels' capacity is being erected at Sidney, Neb., by the Hayes-Eames Elevator Co. of Lincoln. It is located on the Union Pacific tracks.

The Farmers' Grain & Stock Co. of Humphrey, Neb., has purchased the elevator at that place owned by the Omaha Elevator Co. and took possession November 10.

Incorporation papers have been granted the Weekes Grain & Live Stock Co. of Scotia, Neb., which is capitalized at \$30,000 by William, Edgar and Edward Weekes.

A short time since the A. D. Spencer Grain & Elevator Co. of Barneston, Neb., sold its elevator to the Lincoln Elevator Co. for \$5,000. The business has been established for several years.

J. D. Lemmon of Ulysses, Neb., is going to build a new 15,000-bushel elevator at Staplehurst, Neb. Mr. Lemmon writes that the corn crop in his section is only 75 per cent of last year's crop.

IOWA.

The Farmers' Elevator at Armstrong, Iowa, is almost completed.

An elevator to cost \$15,000 is being erected at Rockwell City, Iowa.

The Farmers' Elevator Co. at Le Mars, Iowa, is operating its new elevator.

Charles Martin and George Tudor will enter the grain business at Lacey, Iowa.

The Western Elevator Co. is overhauling and enlarging its elevator at Matlock, Iowa.

Clyde Bell has purchased the elevator, warehouse and scales at Mt. Hamill, Iowa.

The Neola Elevator Co. will close its elevator at Ames, Iowa, while repairs are made.

E. Stevens of Wallingford, Iowa, has sold his grain business to the Stockdale & Dietz Co.

Foster Bros. have succeeded Foster & McCray in the grain business at Mediapolis, Iowa.

Incorporation papers have been filed by the Farnhamville Farmers' Elevator Co. of Farnhamville, Iowa.

N. R. Clift of Zeoring, Iowa, has sold his elevator business to Hayes Bros., who formerly resided there.

Machinery is being installed at the new Bryant Elevator in Vinton, Iowa, and it will soon be opened.

The Wheeler Grain Co. is back of the new elevator to be built at Gowrie, Iowa, which will be in charge of a Mr. Spangler.

The Farmers' Elevator & Live Stock Co. of Boone, Iowa, contemplate improvements to its plant and an increase in capacity.

Work on the Neola Elevator at Madrid, Iowa, is progressing rapidly, the concrete abutments having been finished early in October.

B. M. Stoddard & Son are building a new elevator at Owego, Iowa, which is similar to the Farmers' Cereal Co.'s plant at Sloane.

R. J. Edmonds has sold his grain elevators at McPherson, Iowa, and has moved to El Dorado, Kan., where he owns a large stock farm.

A string of elevators will be erected by the Fort Dodge Co. along the Fort Dodge, Des Moines & Southern, of which there will be one at Harcourt.

The elevator, recently burned at Vinton, Iowa, has been rebuilt by Smith & Smock and will soon be in operation. It has a capacity of 15,000 bushels.

The newly organized Farmers' Grain & Coal Co. of Pocahontas, Iowa, have let the contract for a 25,000-bushel elevator, 26x32 feet in size, with a 36-post crib, to be completed December 10. It will cost \$3,730.

At the annual meeting of the Davenport Malt & Grain Company of Davenport, Iowa, the officers elected were: President, Henry Klindt; vice-president, H. J. Witt; secretary, Henry Bremer; treasurer, P. Pederson Jr. These officers and A.

H. Stollenberg, Herman Wulff and John Stockdale comprise the board of directors.

A Farmers' Co-operative Elevator Co. has been organized at Abbott, Iowa, as an outgrowth of the Abbott Local Union No. 1 of the American Society of Equity.

The O. A. Talbott Co., grain and seed dealers of Keokuk, Iowa, has incorporated with O. A. Talbott, manager for the past three years, as president, and C. H. Currier, secretary and treasurer.

W. A. Spracher & Son have sold their elevator at Lake Park, Iowa, to a farmers' company. Lewis Spracher will remain as manager for the present season and his father may secure another elevator and again engage in business.

F. A. Nelson of Cedar Rapids, Iowa, was awarded the contract for building the elevator at Holland. It will cost a little less than \$4,000, and will be 30x36 feet in size and 35 feet high.

The Updike Grain Co., which owns three terminal elevators and 115 line elevators in Iowa and Nebraska, is endeavoring to get hold of the proposed \$100,000 terminal plant the Commercial Club of Sioux City, Iowa, is promoting. "The Updike Company," Mr. Kuhn, a director, said, "has elevators in Sioux City's territory. We have a terminal elevator at South Omaha with a capacity for handling 500,000 bushels of grain, another terminal elevator at Missouri Valley of the same capacity and a third terminal elevator at Lincoln with a capacity for 225,000 bushels. We are handling 20,000 carloads of grain a year and Sioux City looks just as good to us for a terminal elevator point as does Omaha, Missouri Valley or any other place so long as there is a dollar in the business."

CANADIAN.

Dufresne, Man., wants an elevator.

The Western Oats Co. is a new grain firm at Regina, Sask.

T. J. Hare wants somebody to put up an elevator at Teulon, Man.

Two elevator will be erected at Vegreville, Alta., by the C. N. Railway Co.

McBean Bros., grain dealers of Winnipeg, Man., have dissolved partnership.

The Alberta-Pacific Elevator at Macleod, Alta., is completed and handling grain.

A new elevator is being erected at Dana, Sask., by the British-America Elevator Co.

Work on the new elevator and flour mill at Macleod, Alta., is nearing completion.

An elevator is wanted at Louise Siding, on the C. N. R. right-of-way near Wakeopa, Sask.

A Mr. Wolf has been engaged as grain buyer for the Prudential Exchange Co. of Leng, Sask.

The new elevator F. G. Miller of Gruner, Iowa, has erected at Midland, Ont., is in running order.

Early next season the Northern Elevator Co. of Winnipeg will build an elevator at Vonda, Man.

James Hewer & Son of Guelph, Ont., have sold their grain and seed business to G. T. Hannant of Milton.

Campbell, McLean & Co., grain commission men of Winnipeg, Man., will soon make a change in partnership.

The Anchor Elevator & Warehouse Co., Ltd., of Winnipeg, Man., is the new name taken by the Anchor Cereal Co., Ltd.

The directors of the Goderich Elevator Transit Co. of Toronto, Ont., expect to begin operations in their new elevator about November 15.

McCabe Brothers of Duluth, owners of elevators at Bergman and Rosewell, Man., have purchased the Plum Coulee Elevator from Graves & Riley of Winnipeg.

The new 1,000,000-bushel elevator at Depot Harbor, Ont., is rapidly nearing completion and before snow flies the harbor should have another of 800,000 bushels' capacity ready.

An elevator at Grand Coulee, Sask., owned by Joseph Glenn of Indian Head, collapsed on October 5, and let some 44,000 bushels of grain down. The C. P. railway supplied cars for immediate shipment, so that the loss was small. The building will be repaired at once.

The Saskatchewan Elevator Co., Ltd., is the style of the new million-dollar corporation organized in that province by Senator Jensen of Nebraska. Edward F. Swift, Chicago, is one of the principal shareholders. Others are A. D. Davidson, A. R. Davidson, A. D. McRae (vice-president), Senator Peter Jensen (president). As the next season opens up they will resume building rapidly, and expect to erect fifty elevators for that year. Each will have a capacity of 150,000 bushels, and they will, therefore, be able to handle 7,500,000 bushels. The company expects to handle 1,000,000 bushels of

grain this season from its stations at Warman, Bruno, Wadena, Dalmeny, Fielding, Langham and Humboldt.

Ernest Caron has promoted a \$60,000 corporation known as the Quebec Mountain Hill Elevator Co., and the company will commence the erection of a large elevator at the foot of Mountain Hill, near Quebec, which it is hoped will be ready the first of January. The Otis-Fensom Elevator Co. of Hamilton will do the work.

A report is current that the C. P. Railway Co. will lease its five elevators, with a total capacity of 12,000,000 bushels, at Fort William to a company composed of Winnipeg and Montreal people. Although the railroad company has resisted any attempts at competition in this line in the past it is understood it stands ready to follow the C. N. railroad company in this respect.

A new 1,000,000-bushel elevator is being built at West Fort William, Ont., by the Amalgamated Elevator Co., Ltd., which comprises the Western Elevator Co., Ltd., the Imperial Elevator Co., Ltd., both of Winnipeg, Man., and Samuel Sanday & Co. of Liverpool, Eng. The plant will be modern in every respect and will have trackage for 80 cars. More than 200 elevators in Manitoba and the West are owned by the company, of which S. A. Reid of the Western Co. is president and W. J. Bettingen of the Imperial Co. is secretary.

OHIO, INDIANA AND MICHIGAN:

The new grain elevator at Addyston, Ohio, is in operation.

Goodrich Bros. are building a new elevator at Chesterfield, Ind.

Paulin & Lefferson are planning a grain elevator at Middleton, Ohio.

The Edwin A. Williams Grain Co. is a new incorporation at Cleveland, Ohio.

Erwin Bros. of Jamestown, Ohio, are installing new machinery in their elevator.

Barlow & Gundy have succeeded J. P. Gundy in the grain business at Carroll, Ohio.

Miller & Hinton are the new proprietors of the Goodrich Elevator at Ridgeville, Ind.

J. W. Beck has sold his elevator at Wengertown, Ohio, and expects to locate near West Milton.

Henderson & Cappack of Laura, Ohio, have built an addition to their elevator and will install new machinery.

R. A. Miller has installed a new engine, sheller and other necessary equipment in his elevator at Eldorado, Ohio.

A 20,000-bushel elevator is being erected by the Miami Grain Co. at Bowersville, Ohio. It will be run by a 40-horsepower engine.

A modern elevator is contemplated at Lawrence, Mich., by the Stockbridge Elevator Co., which recently suffered a fire loss there.

J. H. Richey has ordered machinery from the Nordyke & Marmon Co. for his new elevator and transfer house at Trafalgar, Ind.

Rogers & Link, grain dealers at Westville, Ind., have been negotiating with the Monon Route for several months for a new elevator at that place.

H. A. Dillon of North Lewisburg, Ohio, recently purchased the Chamberlain Bros.' Elevator at Kennard, Ohio, which he will remodel and improve.

Ray & Wilkinson of Rockport, Ind., have planned a new elevator and transfer house which the Nordyke & Marmon Co. will equip with machinery.

Work on the new elevator at Yeoman, Ind., is progressive in a satisfactory way. The Farmers' Elevator, built on paper, will probably never be realized.

A large elevator and transfer house is to be built at Scottsburg, Ind., for the Scottsburg Mill & Elevator Co., by the Nordyke & Marmon Co. of Indianapolis.

Davidson & Way will equip their elevator at Sheldon, Ind., with elevating machinery to be driven with electric power supplied by the inter-urban station.

A commodious elevator is being built by the Heffner Milling Co. at Circleville, Ohio, and will be equipped with machinery from the Nordyke & Marmon shops.

W. E. Sheldon of the Stockbridge Elevator Co., Jackson, Mich., writes that there is no new elevator under construction there. An elevator is being built at Goderich, a short distance out of Jackson.

W. C. Vliet, manager for the Stockbridge Elevator Co. at Alma, Mich., during the past six years, and J. R. Watkins, foreman for the same concern, recently organized a stock company known as the Alma Elevator Co. and have pur-

chased the Stockbridge Elevator at that place. The plant has been doing an annual business of \$60,000 to \$75,000.

A 1,000,000-bushel grain elevator is nearly completed at Beach Grove, Ind., for the Cleveland Grain Co. The place is a newly incorporated suburb of Indianapolis.

The McMoran Bros. Co., grain dealers of St. Paris, Ohio, recently purchased an elevator at St. Marys, Ohio, and have placed O. S. Brecount of Thackeray in charge as agent.

The Central Elevator Co. of Cleveland, Ohio, is a new incorporation which is capitalized at \$500,000, of which \$66,666.67 is held in Indiana. J. T. Gehring is in charge.

Stout & King, proprietors of the Big Four elevator at Crawfordsville, Ind., have dissolved. Mr. King retiring because of poor health. The business will be continued by Mr. Stout.

Jeff Ray & Son of Rock Hill, Ind., have placed an order for materials and machinery for their new elevator and transfer house, with the Nordyke & Marmon Co. of Indianapolis.

The Frank Wilder Co. of Hammond, Ind., has been incorporated with a capital stock of \$10,000 to build elevators, etc. Those interested are Frank Wilder, J. Wesley Reed and Edwin W. Bump.

Incorporation papers have been granted the White-Howard Grain Co. of Indianapolis, which is capitalized at \$200,000. The directors are Thomas H. White, William H. Howard, Barbara R. White and Lena L. Howard.

It is said the Saginaw Milling Co. of Saginaw, Mich., has all of its nineteen elevators filled to capacity and has requested its patrons not to market any more grain at present, as cars cannot be secured to move it.

Howard Hoodlemeyer, a former employee of La Due & Carmer, hay and grain dealers at Garrett, Ind., has leased the elevators of the Vandalia Railroad at that place and will engage in business.

Morris Kent & Co., the largest wholesale grain dealers in Kalamazoo, Mich., have incorporated as the Morris Kent Co., with a capitalization of \$10,000. Morris Kent has operated the G. R. & I. elevator in that city for about ten years. The members of the new firm are Morris Kent, Glen B. Kent, Kalamazoo, and Frank Kent of Allegan.

The White River Grain Co. with offices at Winchester, Ind., has been asking for bids for the erection of several modern elevators. The White River Grain Co., with a capital stock of \$8,000, was organized in Randolph County, with the following officers: H. E. McNees, president; Jarvis Cleland, vice-president; C. L. Northlane, secretary and treasurer. The company has purchased the grain elevator of McNees & Brooks at Winchester, and took charge of it November 1, with H. E. McNees as manager. They will probably rebuild and enlarge the plant in the near future.

SOUTH AND SOUTHWESTERN.

It is reported the Mercantile Grain Co. of Houston, Texas, has sold out.

G. H. Benton and S. W. Garrett are building an elevator at Fort Gibson, I. T.

James W. Long is establishing a new grain and hay warehouse at Palatka, Fla.

The Manhattan Co. of Manhattan, Mont., opened its new elevators on October 15.

A new 12,000-bushel corn elevator is being built for the Rea-Patterson Grain Co. at Oaktah, I. T.

The Farmers' Union of Holdenville, I. T., will erect a large grain and cotton warehouse, costing \$2,000.

The Dixie Grain Co. of Shelbyville, Tenn., has started its elevator under the management of H. L. Woosley.

An elevator 64x96 feet in size is to be completed at Ozark, Ark., within sixty days, for the Farmers' Union Warehouse Co.

C. L. J. Sisk & Son and Rev. Z. Pain have secured a building at Houston, Texas, and will conduct a grain business.

The Roberts Grain Co., which moved to Oklahoma City, Okla., from Lone Wolf, reports a good export business, especially at Galveston, Texas.

At a cost of \$20,000 the L. & N. is erecting a 150,000-bushel elevator at Paducah, Ky. The building will be 30x200 feet in size and two stories high.

The Cancy Grain Co. and James Gilliland are building the third elevator in the town of Tulsa, I. T., a place of 400 population. It will have a capacity of 50,000 bushels.

The Dabney Brokerage Co. of Newport News, Va., has contracted with the Burrell Construction Co. of Chicago, Ill., for machinery to be installed in a warehouse which will be converted into a

grain elevator. The equipment will include cleaning machinery and a feed mill.

Schiel & Co. of Yukon, Okla., have acquired the interests of Cleft Bros. of Hastings, Okla., and will complete the 20,000-bushel elevator the latter were building at Marlow, I. T., increasing it to 50,000 bushels' capacity.

Recently the George M. Dizney Grain Co. of Billings, Okla., was incorporated with a capitalization of \$20,000. Those interested are George M. Dizner and Mr. Godzchalk of Billings and James Gibson of Guthrie, Okla.

THE DAKOTAS.

Tripp, S. D., will soon have a farmers' elevator. Two new elevators are going up at Espe, S. D. A farmers' elevator is promised for Tolna, N. D. A new farmers' elevator will be built at Aurora, S. D.

Hunt & Son are building an elevator at Java, S. D.

An independent elevator will be built at Upham, N. D.

Farmers contemplate a new elevator at Jasper, S. D.

The O'Connor Elevator at Belfield, N. D., is operating.

Elevators at Cathay, N. D., are building additional bins.

One of the elevators at Glen Ullin, N. D., is being overhauled.

W. I. Lee is building an addition to his elevator at Winfred, S. D.

R. S. Dawley has just completed a new elevator at Antlers, N. D.

Charles Barta of Mapes, N. D., has sold out his grain business.

Four elevators are being erected in the new town of Cloten, N. D.

Kelley's new 30,000-bushel elevator at Britton, S. D., is receiving grain.

Work has about been completed on the new elevator at Dazey, N. D.

A. N. Barber is receiving grain at his new elevator in Esmond, S. D.

County Commissioner Grant contemplates a new Elevator at Hurd, N. D.

Grain is being received at the new farmers' elevator in Goodwin, S. D.

The Sullivan Elevator Co.'s new plant at Donnybrook, N. D., is in operation.

Palmer & Pollock, grain dealers at Mitchell, S. D., have dissolved partnership.

The Independent Grain Co.'s new elevator at Orient, S. D., is receiving grain.

Stinekopf & Grow's new elevator, the fifth at Drake, N. D., is receiving grain.

The Farmers' Elevator Co. of Kramer, N. D., is doing business in its new elevator.

A. E. Brown's Elevator Co. will build a 20,000-bushel elevator at Garretson, S. D.

Glover & Son have their new 65,000-bushel elevator in running order at Glover, N. D.

The Royal Elevator Co.'s new plant at Sawyer, N. D., will soon be ready to receive grain.

Reagan & Hooper have leased the Exchange Elevator at Eureka, S. D., and are operating it.

O. J. Aaker is erecting an elevator at Stickney, S. D., and will commence buying grain at once.

Work has commenced on the new 25,000-bushel elevator the Peavey Co. is building at Salem, S. D.

The Royal Elevator Co. of Donnybrook, N. D., is erecting an outside wheat bin of 25,000 bushels' capacity.

Two or three elevators are to be built on the new siding the Soo railroad is building west of Lansford, N. D.

F. R. Hoover, buyer for the new Independent Elevator at Crocker, S. D., is receiving grain in the new plant.

The Osborne-McMillan Co. will erect a large temporary warehouse adjoining its elevator at Fessenden, N. D.

The Royal Elevator Co. is erecting an additional warehouse, 42x42 feet in size and 12 feet high, at Martin, N. D.

A cleaner with a capacity of 500 bushels per hour has been installed by the Farmers' Co-operative Co. of Bruce, S. D.

The Great Western Elevator Co. is buying grain at its new elevator in Florence, S. D., of which Paul Lenke is manager.

A new incorporation is the Ventura Mercantile Co. of Ashley, N. D., which is capitalized at \$10,000. The company has just completed a new elevator. Those interested in the business are C. C.

Hammond, John Geizler, John Lippert and Daniel Moench.

A large temporary bin has been built by the Atlantic Elevator Co. at Fullerton, N. D., to care for the oversupply of wheat.

The elevator at Columbia, S. D., owned by the Eagle Roller Mill Co., opened for business recently, in charge of John Moes.

Owing to the increased amount of grain the elevator men at Mowrer, N. D., have found it necessary to build additions to their houses.

On November 1 the new Grand Harbor Farmers' Elevator at Devils Lake, N. D., was opened for business in charge of C. D. Cryderman.

Recently the Homestead Elevator Co. acquired the Koenig & Sons Elevator Co.'s elevators at Underwood, Cole Harbor and Garrison, N. D.

Where only two elevators stood at McClusky, N. D., early in the fall, there are now three elevators, two receiving sheds and a "scooper."

Emil Nels has purchased the A. L. Foster Elevator at Souris, N. D. Mr. Nels was formerly manager of the Imperial plant at that place.

The Atlas Elevator Co. has remodeled its elevator at Moritz, S. D., putting in a dump and gasoline engine. Nick Lehnertz is the agent in charge.

A wheat bin with a capacity of 30,000 bushels of wheat is being erected by Manager Torbenson as an addition to the Royal Elevator at Fessenden, N. D.

A. E. Parmenter, agent for the Shannard Elevator at Scotland, S. D., has been having new bins built and a leg put in, which increases the capacity.

The Farmers' Elevator Co. will open its new elevator at Randolph, S. D., early this month. The building at Stratford is also nearing completion.

The Ferney Farmers' Elevator Co. of Verdon, S. D., is buying on the street but contemplates a new elevator. Al Coburn represents the company at Stratford.

Another elevator will be erected at Lisbon, N. D., by the Great Western Elevator Co. It will accommodate 40,000 bushels of grain. The old elevator will be used as a warehouse.

Elevator companies at Fessenden, N. D., are building large bins with an aggregate capacity of about 80,000 bushels to care for the large quantities of grain tributary there.

D. P. Miller, a well-known elevator contractor, states that more than a hundred elevators have been erected in North Dakota this year, mostly in the western and northern parts.

Boyd McCollough, for two years with the Farmers' Elevator at Britton, S. D., has bought an interest in Bingham's Independent Elevator at Cogswell, N. D., and has assumed charge.

The Peavey Elevator Co. has had men cleaning away the debris of the burned elevator at Salem, S. D., and will commence the building of another, larger perhaps, than the former one.

The Poehler Elevator Co. is erecting sixteen elevators at points along the extension of the M. & St. L. railroad in South Dakota. The one at Aberdeen, just completed, holds 25,000 bushels of grain.

Regan & Lyness of Fessenden, N. D., are building an outside bin, 36x72 feet, with a capacity of about 40,000 bushels. It has machinery for moving the grain from the bin into the elevator.

W. A. W. Culbertson, manager of the Robinson Elevator at Surrey, N. D., stated his company had purchased 50,000 bushels of grain as early as October 15. Twice that amount will be marketed there this year.

G. H. Randall of Canova, S. D., has sold his third interest in the Canova Grain Co., consisting of elevators at Canistota, Salem, Canova and Carthage, to his partners, A. F. Clough and F. N. Dexter.

Because the titles to the town site of Plaza, N. D., are imperfect, the entire town will be moved half a mile and will wait the arrival of the Soo Railroad. A 30,000-bushel elevator forms part of the town.

It has been necessary for the Royal and Atlantic Elevator Companies to build large bins for grain storage, outside their elevators at Courtney, N. D. In this way they are able to accommodate 40,000 extra bushels of grain.

Owing to the scarcity of cars, the Occident Elevator Co. has found it imperative that a few new elevators must be constructed in North Dakota and General Manager George M. Smith has just selected sites for two.

The new elevator at Marion, N. D., erected by the D. S. B. Johnston Land Co., which started up recently, is unusually well equipped. An iron stairway, outside the building, leads to the top, a fine power plant and handsome business office, an easy

driveway and a large grain cleaner and grader make the elevator an ideal one in every respect.

J. L. Williams is buying grain in Ryder, N. D., and piling it on the prairie, where it awaits the coming of a railroad. As there is no telegraph communication in the town he is also laboring under some disadvantage in regards to prices.

The Hubbard & Palmer Elevator Co. of Valley Springs, S. D., has purchased the old Keeney & Son elevator and has a force of men at work tearing it down. The lumber will be taken to Beaver Creek where it will be rebuilt into a new grain storehouse.

Carl Broderson, formerly manager of the Cary-McDermont Elevator Co., has purchased John Cary's interest in the firm, which operates elevators at Kramer, Granville and Tunbridge, N. D. The firm will take the name of the McDermont-Broderson Elevator Co.

Upwards of eighty grain men of the vicinity of Mitchell, S. D., have formed a corporation with a capital of \$100,000 to do a general grain business in North and South Dakota. The corporation is to be known as the North and South Dakota Elevator Co., with headquarters at Mitchell. The officers are: James Carlin of Armour, president; H. H. Dwight of Sioux City, vice-president; A. A. Cruax of Mitchell, secretary and treasurer.

EASTERN.

M. B. Blaisdell is having a grain elevator built at Wolfeboro, N. H.

A. Melcher Graves has opened a grain establishment at Topsham, Me.

Phaon Bittner of Pleasant Corner, Pa., is building a new grain warehouse.

G. H. Wilbur is building an addition on his elevator at Buzzard's Bay, Mass.

J. S. Leavitt & Son, grain dealers at Gorham, Me., are building an addition to their grain mill.

A grain elevator and warehouse will soon be erected by the General Flour & Feed Co. of Syracuse, N. Y.

The R. D. Eaton Grain & Feed Co. of Albany, N. Y., will build a concrete-block storehouse, about 70x170 feet in size.

Arthur H. Merritt, Stanley E. Faithful and James Spicer have incorporated the Chapin Grain Co. at Boston, Mass., with a capitalization of \$10,000.

Meech & Stoddard of Middletown, Conn., are adding a new chimney and are installing new machinery in their elevator, which they hope to have running soon.

The H. R. Segar Co. of Hartford, Conn., is a new grain concern. Henry R. Segar of Westerly, R. I., Oliver C. Andrews of New Haven and Myron A. Andrews of West Hartford are the incorporators.

Recently incorporation papers were filed by the D. W. Rentel Co. at Boston, Mass., by Edward C. Grant, Harry J. Wood, Charles F. Marden and Dexter F. Parker, to deal in grain. The company is capitalized at \$75,000.

WESTERN.

A new grain house is building at Mount Hope, Wash.

Anspacher Bros., Inc., of San Francisco, will dissolve partnership in the grain business.

The McQuarrie-Hull Co. of Seattle, Wash., has established a branch grain-buying station at Prosser, Wash.

A recent incorporation at Spokane, Wash., is the Independent Elevator Co., capitalized at \$200,000. M. Patterson and E. W. Swanson are the incorporators.

The Yellowstone Valley Mill Co. of Billings, Mont., will erect a 100,000-bushel terminal elevator at that place and a string of smaller elevators at surrounding points.

The Boyer Harness & Grain Co. has been incorporated with a capital stock of \$8,000 at Colfax, Wash. Those interested are Arthur C. Palmer, Sam Boyer, Katie Palmer and Essie Boyer.

A. B. Jackson has purchased the grain and other business conducted by J. L. Swank at Colusa, Cal., and consolidated it with his own business. The Swank interests were conducted for many years by the firm of E. W. Jones & Co., and comprise several warehouses. Mr. Swank retires from the grain business to assume the assessor's duties.

The Great Northern has let the contract for its new grain elevator at Everett, Wash., to the American Pile-Driving Co. The warehouse is to be 80 feet long by 150 feet in width. Its height is 20 feet, with the exception of the center of the structure, which is to be built high enough to accommodate trains entering upon the elevated trestle. By the wording of the contract the ware-

house will be completed within three months from the time the work is started.

Incorporation papers have been granted the Wenatchee & Rock Island Warehouse Co. of Wenatchee, Wash., which is capitalized at \$100,000. The president of the new firm is James E. Keene and Charles E. Wildberger is secretary. The company proposes to erect warehouses at Wenatchee, Rock Island and other points along the river and will conduct a general grain business. Mr. Keene is an experienced grain man, while Mr. Wildberger is a banker. Representatives are now being placed at various stations about Wenatchee, including Bridgeport, Chelan Falls, Tram, Hartline, Quincy and Ephrata.

MINNESOTA AND WISCONSIN.

The new elevator at Knapp, Wis., is doing a good business.

The burned elevator at Silver Lake, Minn., is being rebuilt.

Elevator men around Dassel, Minn., complain of slow business.

Andrew Schafer contemplates a new elevator at Elmwood, Wis.

Bingham Bros.' new elevator at New Ulm, Minn., is nearing completion.

A 40,000-bushel circular steel grain bin has been erected at Madelia, Minn.

Grain is being received in the new Western Elevator at Hammond, Minn.

Peter Huisinga has his new grain elevator completed at Prinsburg, Minn.

Burget & Meyer have secured the old Borgerding Elevator at Melrose, Minn.

The Gould Elevator Co. will build a \$35,000 structure at Minneapolis, Minn.

A Mr. Alvord of Superior, Wis., is negotiating for an elevator site at Finlayson, Minn.

A new Clipper Cleaner has been installed by the Market Elevator Co. at Benson, Minn.

The Farmers' Elevator at Redwood Falls, Minn., is completed and grain is being received.

Charles Frederick is managing the new elevator at Villard, Minn., which has just started up.

Jennison's new cement elevator will be completed at Appleton, Minn., by the first of December.

A new grain elevator and hopper are being used by the Two Creeks Trading Co. at Two Rivers, Wis.

Negotiations are being made by the Thief River Milling Co. of Thief River Falls, Minn., for a warehouse site at Dent.

The Farmers' Co-operative Company of Armstrong, Minn., will build an elevator and are already buying grain to fill it.

The W. Seyk Co. of Kewaunee, Wis., which suspended business a year ago at Algona and at Maplewood, has resumed operations.

A. J. Truwe of Norwood, Minn., has recently added needed repairs to his elevator. It has been operating since the early eighties.

A 20,000-bushel elevator being built by the Wylie Farmers' Elevator and Mercantile Co. at Wylie, Minn., is almost ready for occupancy.

The Thorpe Elevator at Perrault Station, Minn., has been sold to the Red Lake Falls Milling Company. Mose Ducharme will be retained as agent.

Recently the St. Anthony & Dakota Elevator Co. of Minneapolis purchased the lumber yards of the New London Milling Co. at Willmar and Raymond, Minn.

A new engine, to replace the small one, will be installed in the Farmers' Elevator at Truman, Minn.

C. C. Erickson and a party at Minneapolis, Minn., have leased the elevator at Cokato, Minn., from the Cokato Elevator Co. Mr. Erickson will manage the plant.

G. T. Harris has purchased the old South Elevator at Hartland, Minn., and has put a new foundation under it as well as making other needed repairs.

A 5-horsepower electric motor, new grain bins and an automatic scale are improvements in the Northwestern Milling Co.'s elevator at Little Falls, Minn.

Early in October the Hennepin Elevator Co. of De Graff, Minn., purchased the Moore Elevator and the occupants of this took possession of the Gillette Elevator.

Buss & Wagoner have purchased the grain elevator at Oconto, Wis., from A. Pierre & P. Lingebach. It has been idle for some time, but will soon be reopened.

A deal has been made through the agency of W. J. Morgan, whereby the Chicago & Northwestern Railway Co. has purchased the elevators and dock property of the Angus Smith Elevator Co. at Milwaukee, Wis. The elevators, which have a ca-

capacity of 1,000,000 bushels and 850,000 bushels, respectively, will be improved to accord with modern conditions.

The Minneapolis & Northern Elevator Company has given its horse at Carlisle, Minn., a "grass" pension and installed a gasoline engine as motive power at the elevator.

Barrett Bros. have purchased the elevator at Thorpe, Wis., of James A. Vance. The former will close out their store at Eldsvold to devote their undivided attention to the business.

Recently the Western Grain Products Co. of Milwaukee, Wis., was incorporated with a capital stock of \$25,000, by Charles A. Krause, Richard O. Winckler and Henry Schomaker.

Machinery is being installed in the mixing house of the Reliance Elevator Co. at Norwood, Minn., and it will soon be ready for use. A 15-horsepower gasoline engine will drive the wheels.

An increase in capital to \$1,000,000 has been recorded by the Imperial Elevator Co. of Minneapolis, Minn. P. L. Howe is president of the company, and A. M. Sheldon general manager.

A farmers' co-operative grain and stock company, known as the Mabel Stock & Grain Co., has been organized at Mabel, Minn. The officers of the new corporation are: T. R. Spande, president; B. Jacobson, secretary.

A new grain mixing house with a capacity of 20,000 bushels has been opened at Glencoe, Minn., by the Union Elevator Co. of Webster, S. D., which operates an elevator at Glencoe. R. E. Van Vleet of Hutchinson has been put in charge of the plant, which is equipped with a grain cleaning mill, with a capacity of 15,000 bushels an hour, as well as other auxiliary machinery. The company will clean the grain from all its elevators at the new plant.

A valuable site has been acquired by the Cargill Elevator Co. from George C. Howe at Rice's Point, Minn., and will undoubtedly soon have a large elevator erected upon it. The property is easily accessible by rail and water and it is the intention of the company to build a plant worth \$500,000, to be constructed of steel, tile and cement. The working house will be one of the fastest at the head of the lakes. The storage houses will be apart from the working house, and in every way the plant will be a modern and finely equipped one.

Work on the new elevator plant of the Washburn-Crosby Co. at Minneapolis, Minn., which was started early in March, is progressing rapidly, though the house will not be completed for several months. The fifteen concrete tanks and eight interstices, which stand 120 feet high, will have a capacity of 750,000 bushels and will cost \$300,000 when completed. The working house which will surmount the tanks will add another 95 feet to the height. It will be of steel, clad with concrete and equipped with warehouse separator and other special machines necessary for the preliminary care of the wheat. A 40-inch belt conveyor will connect this building with the A mill, whence the grain will be delivered to the five mills by spouts at a rate of 120,000 bushels an hour. There are three 3,000-bushel receiving pits and each is provided with a leg through which the wheat is conveyed to the working house and thence to the storage tanks. Fourteen three-phase induction electric motors, operated by a 600-horsepower Westinghouse-Parsons Steam Turbine, will furnish the driving power. The building is being done by the Haglin-Stahr Co. of Minneapolis.

WHAT'S THE MATTER?

Among the various circulars issued by Geo. S. Loftus, commissioner of the Minnesota Shippers' and Receivers' Association, is one entitled "What's the matter with Minnesota?" Briefly it is a comparison of railway mileage and service in Minnesota with that of Iowa. An enquiry shows that Minnesota, with 2,246 miles of railroad, or 30 per cent less mileage than Iowa, paid such excessive rates that her railroads made \$19,316,968 more, or 217 per cent net earnings per mile, in excess of the Iowa roads. Equalizing the mileage of the two states, Minnesota paid at the rate of \$21,112,053 more than Iowa in the net earnings to her railroads in 1903. From the reports of the railway companies, furnished by themselves, it appears that the mileage and net earnings of the several railroads operated in Iowa and Minnesota in 1903 were as follows:

	Mileage.	Net Earnings.	Net Earnings Per Mile.
Iowa	2,496	\$16,433,235	\$1,730
Minnesota	7,250	35,750,203	4,900

The L. E. & W. R. R. started out a seed corn special over its lines on November 13 under the direction of the Purdue University Experiment Station.

COMMISSION

The White-Howard Grain Co. has been incorporated at Indianapolis, Ind.

L. S. Gillette, G. A. Morris, C. E. Thayer and G. M. Gillette have incorporated the Delmar Elevator Co. of Minneapolis.

Thomas L. Martin, for several years with the Sherry-Bacon Grain Co., St. Louis, has gone with Annan, Burg & Co. of that city and will represent them on 'change.

W. T. Watters McKay, a grain and provision broker of Baltimore, has sold his membership on the Chamber of Commerce and will go to the south of France in the interest of his health.

The Edward A. Williams Grain Company has been incorporated at Cleveland, Ohio, with a capital stock of \$5,000, by Edward A. Williams, L. E. Juergens, C. A. Williams, R. C. Linder and Frank Geutsch.

Stevens & Miller have succeeded H. J. Stevens in the grain and flour business at Montreal, Que. The new member of the firm is W. H. D. Miller, for a number of years with the Canadian Pacific Railway.

The St. Louis office of Chapin & Co., Minneapolis, is now in charge of E. A. Witter. John E. Geraghty, the former manager, has gone to Minneapolis to become president of the Northwestern Feed Co.

Robert W. Harper and Wm. E. Ward, grain brokers at Des Moines, Iowa, have consolidated under the style of Harper & Ward. Mr. Harper is of the Harper Grain Brokers and Mr. Ward has been with Ware & Leland. The new firm will use the Ware & Leland wires.

R. E. Pratt, for many years prominent in the grain trade and formerly vice-president of the hominy combine, has sold his membership on the Chicago Board of Trade. He has not been active in the grain trade for some years and is devoting much of his time to operating in farm lands in the Canadian Northwest.

Walter A. Morse, an old member of the Chicago Board of Trade, recently met with a serious accident which resulted in the loss of his right eye. He was developing photographic lantern slides in his laboratory when a piece of steel entered his eye, destroying the sight. He was taken to St. Luke's Hospital, where the injured eye was removed.

FIGHT ON BUCKET-SHOPS.

The Minneapolis Chamber of Commerce has begun suits for injunction against the following firms, alleging that they are bucket-shops and are using illegally the quotations of the Chamber, the said quotations being obtained illicitly by means of glass doors, fictitious and deceptive orders and fraudulent and deceptive telephone and telegraph messages: Samuel D. Longley, William P. Gurr and the Longley Commission Company, engaged in business as the Longley Commission Company; Charles L. Bauman, C. L. Bauman; Henry S. Zoller, H. S. Zoller & Co., doing business as H. S. Zoller & Co.; Houghton C. Thomas, Benjamin M. Mulford, co-partners in the firm of H. G. Thomas & Co.; W. S. Daggett, M. J. Brophy and Thomas J. Gibbons, copartners; Joseph W. Sullivan, Benjamin C. Elder and Frank Thomas; Andrew Liddell, Merrill Sheeley, Frank C. Bowker and Sumner Johnson, organized as J. E. Wells & Co.

It is further alleged that the defendants are evading the bucket-shop law by obtaining written statements from their customers, and it is alleged that the Minneapolis Independent Grain and Stock Exchange is the headquarters for the distribution of the information fraudulently obtained. It is also alleged that in using the Chamber of Commerce quotations, one-eighth cent a bushel is systematically added, and that the quotations are given out under the name of "the Superior Board of Trade," "Minneapolis delivery," "Superior quotations," and other names, which are declared mere artifices to avoid the charge of using the chamber quotations. Most of the defendants are of the tin-horn type.

If the contention of the Interstate Commerce Commission in the case of the Iowa Grain Dealers' Association, that the daily price cards sent out from Des Moines constitute an attempt to fix prices and restrain trade, is good law, there is about due a revolution in the methods now employed in handling Northwestern elevators.—Duluth Commercial Record.

THE EXCHANGES

L. T. Jamme has been re-elected secretary of the Minneapolis Chamber of Commerce.

The executive committee of the Baltimore Chamber of Commerce has completed arrangements whereby continuous grain quotations of the Minneapolis Chamber of Commerce will be posted on the Baltimore exchange.

As a result of the efforts of the Grain and Produce Committee of the Little Rock (Ark.) Board of Trade the grain business of that market is steadily growing. The receipts of corn last year were 2,618,000 bushels, of oats 1,286,000 bushels and of wheat 26,400 bushels.

President Fitch of the Chicago Board of Trade has appointed the following committee to investigate questions pertaining to elevators, public and private, their methods of doing business, and their relation to the business of the Board of Trade: Charles L. Raymond, chairman; James H. Milne, John B. Adams, George R. Nichols, Edwin S. Skillen, Edward S. Hunter, William N. Eckhardt, J. Herbert Ware, William S. Crosby.

Seats on the Winnipeg Grain Exchange have been advanced to \$4,000 and all the available memberships have been sold, bringing the number of members up to 300, the present limit. There was considerable competition for seats at the former price of \$2,500. But a few years ago seats were selling for \$250. Last spring they were advanced to \$2,500 and there were about sixty-seven undisposed of at that time. These have now been sold and the proceeds, \$170,000, will be applied on the new exchange building now in course of erection.

The call board committee of the Milwaukee Chamber of Commerce has adopted the following rule: "All deliveries of grain on sales made on the call board must have billing showing shipments from points outside of Milwaukee within the time specified in the contract, unless otherwise agreed upon at the time the trade is made." The new rule was put in force to settle the controversy as to whether orders might be filled with grain from Milwaukee elevators. A stock call has been established in connection with the grain call board and there will be two calls daily.

The grain men of the Cincinnati Chamber of Commerce have been discussing a change in commission charges. The present rules provide only for a maximum charge and a committee appointed by one section of the trade presented a report advocating the establishment of a minimum charge. Some of the members are opposed to this action and the matter was finally referred to a special committee of five. Those who are in favor of the change say that owing to the absence of a standard commission charge much grain and hay is handled on an extremely small margin of profit.

The New York Produce Exchange recently requested the Montreal Corn Exchange to state whether it would co-operate in having a uniform rule adopted with regard to what constitutes "first half" and "last half" of shipments. The chairman of the committee on exports of the New York Exchange stated that he believed the majority of the New York exporters favored making "first half" shipments up to midnight of the sixteenth day in uneven months, and up to midnight of the fifteenth day on even months. The Corn Exchange committee replied that in the event of the New York Exchange adopting this rule as specified the committee would recommend the adoption of the same rule by the Montreal Association of the Corn Exchange.

There is a movement on foot at Atlanta, Ga., backed by the Atlanta Chamber of Commerce, to establish an exchange to furnish quotations on grain, cotton, stocks, etc. It is said that the members of the Atlanta Grain Dealers' Association are opposed to this action, on the ground that some of the grain dealers are not members of the Chamber of Commerce and that in order to enjoy the benefits of the exchange they would be compelled to join. They claim that the advantage to be obtained will not warrant the expense. A. V. Curran, manager of the Southern Cotton Exchange, which goes out of business on January 1 as a result of the passage of the Boykin bill, has offered to supply the members of the Grain Dealers' Association with quotations for \$2,500 a year.

A Seattle paper has the following from Ritzville, Wash.: B. B. Gillespie, an extensive wheat grower east of town, who harvested 81,000 sacks of grain this season, was not satisfied with the grades awarded on his wheat last season, and knowing his crop, as a whole, was good, con-

ceived the idea of taking buyers to his field and getting bids on his crop. Buyers were anxious to go out, and as a result he will realize about 2 cents on the bushel more than if he had sold upon delivery at the warehouse.

SOME NUTS TO CRACK.

There's plenty of wheat in Chicago that people are said to want; and the price goes down because they can't get it. That's stranger still. The elevator people make money holding cash wheat, and not selling any, so they may sell it three or four times over for future delivery without delivering any. That's strange and funny, too.

Why do these strange things occur in the wheat trade? Because we deliver on contracts three different varieties of wheat as one. This delivery is recognized nowhere else on earth, and not respected at home. These three different varieties have all different values; and for twenty years we have lost our trade, and merchants have lost their money, trying to make them all go at the same price. This has gone on till about the only business we have left is telegraphing and writing letters to those who have withdrawn the patronage that was ruining them to come back and try it just once more. Just once more, because there are weevil in Missouri, or locusts in Argentina, or drouth in India, or winds blowing the wheat out of the ground in Kansas, that are going to do the thing this time, sure! If millers, merchants and producers insist upon milling and trading in and growing these different varieties, it seems to me that it is time for us to admit that there is a difference in the cost of production and in flour-making capabilities that those who give us business wish to trade on.

We may raise, lower, double or halve our commissions without producing much effect in the volume of trade unless we adopt a system that the laws of mercantile business call for between all merchants. If we are determined to pursue the present method, I suggest that we can our wheat, brand it as selected stock and sell it under the guarantee of "Chicago No. 2 Regular," just as they do with potted ham and lunch tongue. Until we can make our wheat deliveries acceptable under cover in this way, I can only advise the purchase of wheat openly when on the basis of the cheapest trash in order to sell it later under the apprehension or fear of famine.—E. W. Wagner.

IS SPECULATION OF DIVINE ORIGIN?

A Belleville correspondent signing himself "Doubtful," in a letter altogether too long for publication in full in these columns, says:

"Your question of last week, 'Is speculation of divine origin?' and your answer thereto, struck me as very original, if not altogether logical. It certainly opens up a nice subject for argument both for and against your contention.

"I for one am of opinion that the Divine Architect who framed the universe dealt in the creation of facts and fulfillment of promises, rather than speculated in results, as understood in our business life. For instance, take the cheese trade, in which a lot of speculation has been going on this season, especially in respect of short sales. Now, sir, can you point to a single fact from the creation of Adam and Eve to the present time that would prove that the Almighty 'dealt in futures' as you put it, the same as some of your Montreal shippers have done this season?"

To this we would simply ask, was not the coming of the Messiah promised centuries before he made his appearance? If this was not "dealing in futures" by divine authority, it seems very like it. Referring to our article of last week upon speculation being of divine origin, a well-known banker in this city questioned the propriety of our introducing this subject at the present time, for, said he:

"It will give Charlie McGill, the late manager of the Ontario Bank, a strong plea in defense of his big speculations with the funds of the institution, namely, that of divine authority."

We would merely say in our own defense that speculation, as applied to divine methods, means deep reflection, study, contemplation, meditation, depth of thought, self-counsel, invention, meditation, creative ability, etc.; if these are not amongst the divine attributes, we would ask what are? At any rate this closes the discussion, and we would merely say that our remarks were not intended to apply to other than legitimate speculation, without which business could not be conducted to any great extent in the present day.—Exchange.

Adams, Wash., recently shipped 3,000 bushels of oats to the Quaker Oats Company at Cedar Rapids.

COURT DECISIONS

[Prepared especially for the "American Elevator and Grain Trade" by J. L. Rosenberger, LL. B., of the Chicago Bar.]

Difference Between Bailment and Sale of Grain and Rights Thereunder.

It is often difficult, the Supreme Court of Oregon says (Savage vs. Salem Mills Co., 85 Pacific Reporter, 69), to determine whether a particular transaction is a sale or a bailment, and especially so when it involves grain delivered to a person and by him mixed and mingled in a common mass with grain belonging to himself or other parties. If a specific amount of grain is delivered by the owner to be returned when called for, either in its original or in an altered form, there is, of course, a plain case of bailment; but when the grain of different owners is mixed and mingled in a common mass by their consent, a different and more difficult question arises.

The original idea of a bailment contemplated the return of the identical article, delivered as soon as the purpose of the bailment was accomplished. But the business of storing, transporting and handling grain has grown to such proportions in recent years as necessarily to have wrought a change or a modification in the doctrine requiring the subject of bailment to be returned to the bailor. The delivery to public warehouses, or elevators, of thousands of bushels of grain for storage and safe keeping by hundreds of owners renders it impracticable, if not impossible, to keep that of the several owners separate so as to return the identical grain delivered, and this is no longer expected or required. The only separation now called for by law is to keep grain of the same class in bins by itself so the owner may have returned to him grain of the kind and quality delivered, and, therefore, upon deposit of grain with a warehouseman to be mixed with the grain of other persons, the depositor becomes the owner of his pro rata share of the entire mass, and the transaction is a bailment and not a sale.

But the warehouseman is not authorized to use, sell, or dispose of the grain stored with him or any part thereof without the consent of the owners. He may, from time to time, upon the order or at the request of an owner, take from the common mass grain in amount equal to that stored for or by such owner, but he is required always to retain of the grain so stored sufficient to supply the other storers, and cannot use or dispose of any part thereof for his own benefit. He is a mere custodian of the grain, with no right to use it in any way; and herein lies the essential difference between a bailment and a sale. In the one case, the title to the property remains in the depositor and the bailee is but a mere custodian; while, in the other, he may use and treat the grain as his own, the depositor relying upon his personal credit for the value thereof, either in kind or in money. Where one delivers grain to another under an agreement that the identical grain or grain of a similar kind and quality from the common mass into which it was placed shall be returned, there is a bailment, and the right of property remains in the bailor; but when, either from the express agreement of the parties or from the general course of business, the party receiving the grain has a right to use it in his business and as a part of his consumable stock and is not obliged to return the identical grain nor grain of similar grade and quality from the common mass, but may discharge his obligation to the storer by paying the market price when demanded, or by returning other grain of the same kind and quality, there is no bailment, but a sale or exchange, and the title of the property and the risk are transferred to him.

To determine who shall bear the risk and enjoy dominion over grain which has been by common consent mixed and mingled with that belonging to other parties, we must, therefore, have recourse to the nature of the transaction, for the rights and liabilities go according to the legal title. And where by consent of all parties wheat was mixed with and became a part of the consumable stock of a mill, and the mill company had a right to and did make such use of it as it saw fit, being liable to pay therefor, on demand, either in money at the market price of grain of like grade and quality or in other wheat of the same grade and quality, the effect of the transaction was to create a debt from the company to the depositors, which it could pay either in money or in kind; and the title passed. Provisions in the receipts issued therefor, "damages by the elements excepted," and for the payment of storage charges and sacks, would not vary the nature of the transaction or change what would otherwise be a sale or exchange into a mere bail-

ment. Nor would the fact that there was no special or distinct agreement that the company should have the option to pay for the wheat either in money or in kind be important.

Observations on Warehouse Receipts.

When a receipt is issued by a warehouseman and accepted by the owner of goods stored as containing the terms and conditions upon which the commodity was delivered and received, the Supreme Court of Oregon says (*Savage vs. Salem Mills Co.*, 85 Pacific Reporter, 69), it becomes the contract between the parties and cannot be contradicted or varied by parol (oral) testimony, but when the receipt is silent as to the terms of the contract, they may be shown by parol, or, when the language of the receipt is ambiguous or uncertain, it must, like any other contract, be interpreted in the light of the surrounding circumstances. And, in the absence of an agreement to the contrary, the usage or custom of a particular business will enter into and form a part of a contract made by a person engaged in such business and those dealing with him with knowledge of such custom and usage, although proof of custom or usage is never admissible to give interpretation to a contract inconsistent with its language.

In this case load checks of this form were filled out and used:

"No. ... S. F. M. Co., Salem, ..., 189... Received from ... bushels. Sacks returned, ... Sacks returned empty, ... weigher. Not transferable."

Or, if desired, there would afterwards be given for these checks receipts of this form:

"No. ... Salem Flouring Mills Co., Salem, Oregon, ..., 189... Received in store for account of ... bushels of merchantable wheat in bulk, subject to ... order (damage by the elements excepted), on or before the first day of July next, on payment of two and one-half cents per bushel storage and ... cents per bushel for sacks and the return of this receipt properly endorsed, the wheat being deliverable on boat or cars sacked. It is understood and agreed that the Salem Flouring Mills Co. are to have the first refusal of said wheat. Bushels, ... Salem Flouring Mills Co., per ..."

This receipt, the court says, is ambiguous, uncertain and indefinite on its face. It does not contain the name of the person from whom the wheat was received, nor truly state the quality of such wheat, nor all terms and conditions upon which it was received. It recites that the wheat was received in store "for the account" of a named person, but not "from" such person as the statute requires. It does not state that the wheat would be returned or redelivered, but that it would be subject to the order of the person for whose account it was received on or before a certain date upon the payment of charges, and is silent as to the terms of the contract under which it was to be held and disposed of after the time stated. Moreover, the right of the person for whose account it was received is limited and restricted by the provision that the company "is to have the first refusal of such wheat." The meaning of this latter clause is doubtful, but was probably intended to give the company a preferred right to purchase at all times, and to limit the right of the holder of the receipt to receive grain in return therefor to cases in which the company did not care to purchase.

It is manifest, therefore, that the load checks and receipts do not alone express the contract. They are but part of the transaction. Their importance is only made apparent upon proof of the custom and usual course of business of the company, known and acquiesced in by the depositors, and the purpose for which they were issued. The entire contract between the company and the persons delivering wheat to it was not embodied in the written memoranda, and it is not from a consideration of the writings alone that the character of the transaction or the respective rights and obligations of the parties is to be determined. The entire contract must be ascertained from the custom and usage of the business and the general understanding of the parties in connection with such load checks and receipts. The words "in store," used in the receipt, are not controlling as to the nature of the transaction.

A demand and refusal were necessary under the contract in order to fix the company's liability, for it was not required to pay for the wheat delivered, either in kind or in money, until required to do so.

H. L. Fluhrty of Rosetta, Idaho, who was awarded first premium at the Lewiston-Clarkston fair, on field corn, sweet corn and popcorn, had 60 acres in corn last season, and says it is the most profitable crop he can raise on the Camas prairie, as he has received from a cent to a cent and a half per pound for his shelled corn. At this rate he can make more money raising corn than wheat.

IN THE COURTS

The G. N. Ry. Co. has begun an action at Crookston, Minn., to prevent the Wylie Farmers' Elevator Co. from erecting any buildings on its right of way.

E. R. Ulrich, Springfield, Ill., has sued the Washburn R. R. Co. for \$2,000, being the value of a grain elevator at Dawson demolished by the railroad's employees without the consent of the owners.

A meeting of the creditors of the Spencer Grain Co. was held on November 5 at Minneapolis, and claims were filed aggregating \$74,463.74; the Security Bank claiming \$34,055.04 and the Cargill Elevator Co. \$15,343.33.

William P. Hancock of Redkey, Ind., has filed suit at Portland against the Muncie & Portland Traction Co., asking damages in the sum of \$2,500. Mr. Hancock is engaged in the hay and grain business in Redkey, and he alleges that the Traction Company built its tracks so high he cannot conveniently use his elevator.

J. H. Scott, a laborer, has sued the Des Moines Elevator Co. for \$5,000, for personal damages. He claims that on July 30 he was ordered to assist in repairing certain parts of some broken machinery on the fourth floor of the elevator, in making which he was in some manner thrown over a shaft and his right foot was caught in a wheel, and the ligaments of his leg were torn loose from the bone, and he has been unable to do work since.

Myers & Patty, grain dealers at Pleasant Hill and Rangeville, Ohio, have sued the receiver of the C. H. & D. R. R. Co. for \$7,500 damages. The plaintiffs charge the defendant railroad with discrimination in furnishing cars for the transportation of grain, in favor of Samuel Rudy of Covington, who also operates a grain elevator. This is one of the first suits of the kind brought in Ohio. The statute allows suit to be brought for each case of discrimination and for no less sum than \$500 for each offense.

The case of G. C. & S. F. R. R. Co. vs. The State of Texas was argued at Washington in October. The case involved an alleged overcharge by the railroad in hauling a carload of goods from Texarkana, Texas, to Goldthwaite, Texas. The Texas courts all decided against the road. The claim is made by the road that the shipment was not under the jurisdiction of the Texas Railroad Commission, as the goods were in reality shipped from Kansas City, Mo., to Goldthwaite and that the Interstate Commerce Commission should issue jurisdiction, and the question at issue is: What constitutes an interstate and what an intra-state shipment?

The attorney-general of Oklahoma has filed a complaint with the Interstate Commerce Commission against the various railroads operating through Oklahoma to the Gulf ports, alleging unfair and illegal rates on grain and discrimination in favor of towns in adjoining states. The complaint asserts that a reasonable charge for transportation of wheat to export points per ton mile would be 5 mills, while the roads are charging in no case less than 7.75 mills per ton mile. It is alleged that the sixteen railroads charged have agreed among themselves to maintain uniform rates, and that they all discriminate in favor of the long haul from points in the states alleged to receive favors from the railroads. The Commission is asked to fix a just rate on wheat from Oklahoma points to Galveston. Suits have been begun in state courts also to prevent alleged transportation abuses.

The ancient suit of Mrs. Ida K. Reynolds of Crawfordville, Ind., against the Hammond Elevator Co. came to a decision at Hammond recently, judgment being a favor of the Elevator Company. The suit was begun in 1901, when one John H. Rowe, acting ostensibly as agent for what was then the Central Stock and Grain Exchange of Hammond, operating a bucket shop in Crawfordville, had for one of his customers Mrs. Ida K. Reynolds, who, upon the death of her husband, had several thousand dollars' worth of life insurance money lying idle. She dealt with Mr. Rowe in various transactions in hundred dollar sums from time to time, until she had invested \$9,000, which was speedily wiped out in the complex transactions between purchaser, agent and principal. Then she sued. In her complaint she alleged that she supposed that Rowe was buying certain stocks outright for her. The jury, however, apparently thought that she knew she was simply bucket-shop gambling and found for the defendant company. One of the features of the case was a hunt in three or four states for Rowe, who shut up the shop in Crawfordville when the officers tried to get service on

him. He was traced to Detroit and lost there. Then detectives finally landed him in Milwaukee.

A number of grain rate cases are in the courts of Mississippi awaiting decision. First there is the case of the Mississippi Railroad Commission vs. the A. & V. Ry. Co. in the U. S. Supreme Court, on appeal, the state courts having sustained the contention of the Railroad Company that a grain rate of 3½ cents, Vicksburg to Meridian, was not remunerative. A similar case is the Commission vs. A. & V. R. R. Co., the rate in controversy being 4½ cents Vicksburg to Hattiesburg, and the case of the I. C. C. vs. M. & O. R. R. Co. in which the Commerce Commission seeks to enforce a lower rate on grain and grain products from St. Louis to Meridian, Miss.

On October 19 a decision was rendered by a court at Watonga, Okla., on the application of the Territory of Oklahoma, granting an order restraining the C. R. I. & P. Ry. Co. from charging within the territory a higher rate than is authorized by the laws of the state of Kansas. The order also restrains the company from charging for the transportation of wheat and corn certain rates called arbitrary rates, fixed by the company and alleged to have been charged by the company for the protection of through rates. In passing upon the question the court held that the act of Congress granting a right of way through the territory of Oklahoma to the Railway Company established the rates which said company could charge in the territory of Oklahoma and that said rates should not be in excess of the rates authorized by the laws of the state of Kansas. The same proceedings have been instituted against the Frisco and other companies.

In the case of the Central Granaries Co. of Lincoln, Neb., against Lancaster County the Supreme Court has decided that the method of assessing brokers in Nebraska shall be on the basis of their average capital invested for the preceding year, and not on the amount of grain on hand April 1. The Central Granaries Company was assessed in Lancaster County for \$10,000 worth of grain found in its possession. The company has branch houses at forty different towns in Nebraska. Its three principal elevators, at Lincoln, Rulo and Holdrege, are used for cleaning the grain gathered at other points. The consignment of grain valued at \$10,000, assessed in Lancaster County, was claimed to be grain in transit. The firm alleged that it had already been assessed for this grain in a total valuation of \$336,735, representing the average value of its capital employed in the whole state. The court holds that the assessor should not have included this consignment in making up his schedule. Under the opinion it makes no difference whether there is any grain on hand April 1. The tax will be computed on the average amount of business transacted by the firm throughout the year. The judgment of the district court upholding the assessment is, therefore, reversed.

ARBITRATION DECISIONS.

A decision by the arbitration committee of the Grain Dealers' National Association: This award was made in March last, but was not then given out, because of the refusal of the secretary of the Texas Grain Dealers' Association to instruct his member, the defendant, to comply with the terms of the award unless the National's committee would review the case and take into consideration the award of the arbitration committee of the Texas Association. Mr. McCray of the National committee very kindly consented to do this.

Caswell E. Rose, Nashville, Tenn., vs. The J. T. Stark Grain Company, Plano, Texas.—We, the undersigned, members of the arbitration committee of the Grain Dealers' National Association, beg leave to submit the following decision upon the case of Caswell E. Rose of Nashville, Tenn., vs. The J. T. Stark Grain Company of Plano, Texas:

From the information submitted to this committee it would seem the chief contention between these parties is one of discrepancy in weights. The defendant sold to plaintiff ten cars of oats at a given price, delivered Memphis, but to be billed to Nashville. There was nothing specified in the trade as to where the oats were to be weighed; but this matter is not material, for the reason there is practically no difference in the weights except on two cars. Out of the ten cars shipped, it appears that six overran the shipper's weights at destination, while the remaining four fell short as follows: One car 20 pounds short; 1 car 215 pounds short; 1 car 1,275 pounds short; 1 car 12,000 pounds short.

You will see, therefore, there is really contention on but two of these cars, as the other differences were so slight it could easily be due to a variation in scales. The records also disclose that the other cars overran from 15 pounds to 515 pounds on each car. Thus it will be seen that on eight of the cars the scales were weighing very

closely, and it looks like any great departure from this uniformity would be an error in weighing.

We find most of the trouble arises on car No. 21,838, which shows a difference of 12,060 pounds. The plaintiff, however, substantiates his weights in this matter by sworn certificates from his weighmaster, also from himself and one other party. Each of these parties makes affidavit to the fact that this car contained but 27,680 pounds, whereas the shipper's invoice called for 39,740 pounds. In addition to these affidavits concerning the weight, they each aver that the car contained but 193 bags of oats, which being reduced would give an average of a little over 141 pounds to the bag.

We also find further affidavits from the plaintiff, and from his weighmaster, stating that before this car was unloaded their attention was called to the apparent shortage and they were, therefore, very careful regarding the weights.

It is also disclosed from the evidence furnished that the sacks in the other cars were all found to average about the same amount in each sack as was found to be in the car which fell so short. This would show to the committee that the error must have been made at the point of origin, as it does not seem possible that two men could make a mistake in counting 193 sacks; consequently plaintiff's weights must be correct.

In view of the facts as furnished to us, we have concluded that the plaintiff is entitled to the amount claimed, and, therefore, render a judgment in his favor of \$52.27, and in addition thereto the cost of arbitration is to be borne by the defendant.

Respectfully submitted,

C. B. JENKINS,
ADOLPH GERSTENBERG,
WARREN T. McCRAY,

Committee.

Following are decisions rendered by the arbitration committee for Texas Grain Dealers' Association:

Hillsboro Grain & Elevator Co., plaintiff, vs. R. N. Garrett Commission Co., defendant.—In the above styled case pending adjustment by the arbitration committee of the Texas Grain Dealers' Association, we, the committee, find for the plaintiff, the Hillsboro Grain and Elevator Company.

The evidence submitted in this case shows that on April 7 plaintiff wrote defendant, requesting that defendant "wire us promptly Monday morning if you can confirm a car of good white corn bulk at 60 cents delivered here, and oblige, etc." In answer to this telegram defendant wired plaintiff on April 9, referring to plaintiff's letter, and offered one car two white corn at 61 cents, one car sacked 64 cents, one car shuck 58 cents, few weevil, ship shuck to-day, balance this week, subject to your immediate reply by telegraph. In reply to the message plaintiff wired defendant: "Can use one car Texas No. 2 white corn at 60 cents, about 600 bushels, 'shipment this week.'" In reply to this message, defendant wired plaintiff: "Book one car No. 2 white corn 60 cents, will ship this week."

Since plaintiff asked defendant for quotation on car corn delivered "here" (meaning Hillsboro, of course), and a trade was consummated as a result of this inquiry, the committee holds that it was not necessary for plaintiff to furnish defendant with confirmation setting forth shipping instructions and that defendant should have understood what destination plaintiff wished shipment made to.

Plaintiff submit evidence showing that it, plaintiff, bought a car of corn for account of defendant, on April 28, to apply on this contract, at a price 5¼ cents per bushel above the price at which the corn was originally bought from defendant, and ask for a judgment against the defendant for the amount of this excess, amounting to \$31.50, and expenses incident to the transaction, amounting to \$5. The committee awards to plaintiff the amount of \$31.50, claimed for difference in price, and orders that defendant, the R. N. Garrett Commission Company, promptly pay to the Hillsboro Grain and Elevator Co., at Hillsboro, Texas, the amount of this award, \$31.50, and the secretary is instructed to return to plaintiff, the Hillsboro Grain and Elevator Co., its deposit fee in this case.

Boone Kirk, plaintiff, vs. Home Grain Co., defendant.—In the above styled case pending adjustment by the arbitration committee of the Texas Grain Dealers' Association, we, the committee, find for the plaintiff, Boone Kirk.

From the evidence submitted it appears that defendant sold to plaintiff a quantity of oats for July shipment, to be No. 3 or better, basis, Memphis weights and inspection; that two cars shipped to apply on this contract missed grade. The plaintiff, therefore, claims a forfeit of one and one-tenth cents a bushel on these two cars, containing 2,700 bushels, and submits evidence to show that the amount thus forfeited was the same as was agreed upon between plaintiff and defendant on several cars, the shipment of which defendant had previously defaulted on.

The committee, therefore, is of the opinion that the two cars shipped by the defendant, which

missed grade at Memphis, were not applicable on the contract and as a result defendant owes plaintiff the amount of one and one-tenth cent per bushel on 2,700 bushels of oats contained in these cars, and amounting to \$29.70, which the defendant, the Home Grain Co., is hereby ordered to promptly pay to Boone Kirk at Fort Worth, Texas; and the secretary is instructed to return to plaintiff, Boone Kirk, his deposit fee in this case.

Early & Clement Grain Co., plaintiff, vs. Smith Bros. Grain Co., defendant.—In the above styled case, pending adjustment by the arbitration committee of the Texas Grain Dealers' Association, we, the committee, find for the plaintiff, the Early & Clement Grain Co.

The evidence in the case shows that on August 30 defendant wrote plaintiff with reference to a car of oats. Plaintiff asked defendant to bid on, using the language: "We couldn't pay over 33½ cents per bushel here for these oats. Let us hear from you if you can accept this offer on the car." Plaintiff has shown this committee that they, the plaintiff, wired the defendant on the same day plaintiff received defendant's letter accepting defendant's offer. Defendant immediately wired plaintiff that it, defendant, could not confirm the purchase on account of the market being lower. The plaintiff submits evidence showing that it, the plaintiff, disposed of this car of oats to the best possible advantage at a price 1 cent per bushel less than defendant offered it, and ask judgment for this difference in price, amounting to \$12.48, and expenses, amounting to \$2.80, incurred in making disposition of the oats for defendant's account.

After carefully considering the evidence in the case, the committee is of the opinion that defendant made a bona fide offer on the car of oats in question and the plaintiff accepted this offer, thus completing the contract. The committee, therefore, finds for the plaintiff in the sum of \$12.48, and the defendant, Smith Bros. Grain Co., is hereby ordered to promptly pay to the Early & Clement Grain Co., at Waco, Texas, the amount of this award, \$12.48, and the secretary is instructed to return to plaintiff, Early & Clement Grain Co., their deposit fee in this case.

T. G. MOORE,
G. C. MOUNTCASTLE,
E. R. KOLP,

Committee.

[Attest] H. B. DORSEY, Secy.

J. W. Webb & Co., plaintiff, vs. J. Rosenbaum Grain Co., defendant.—In the above styled case, pending adjustment by the arbitration committee of the Texas Grain Dealers' Association, we, the said committee, find for the defendant, Rosenbaum Grain Co.

From the evidence submitted in this case, it appears that J. W. Webb & Co. sold to J. Rosenbaum Grain Co. a car of wheat and that plaintiff, when they saw that they would be unable to make the shipment within the contract time, called up defendant by phone and asked for an extension of time. Defendant told plaintiffs that it would be agreeable for plaintiffs to have bill of lading dated June 16 and accept the car of wheat on the contract, if the car was shipped Monday or Tuesday. The plaintiffs have submitted no evidence to this committee to show that the car was shipped under the time of the extension of the contract, and hence the committee finds for the defendant, J. Rosenbaum Grain Co., and the secretary is hereby instructed by the committee to return to the defendant, the J. Rosenbaum Grain Co., its deposit fee in this case.

T. G. MOORE,
E. R. KOLP,
KENT BARBER,

Committee.

[For the "American Elevator and Grain Trade,"]

MUTUAL INSURANCE LAWS.

BY C. A. McCOTTER.

It is a peculiarity that the New England states have for years had laws for the organization of good mutual companies; and a large number of companies organized in those states have saved thousands of dollars annually to property owners, in spite of the fact that the stock company rates in New England are lower than anywhere else in this country. The northern-central states, like Ohio, Michigan, Indiana, Illinois and Wisconsin, have for many years had laws authorizing the organization of mutual companies and providing for the admission of good mutual companies from other states. The result of this competition has been that in those states there is little complaint about the stock company rates, as anyone not satisfied with the stock companies' charges can secure good mutual insurance.

As against this record, there is the other peculiarity that there is not a single state west of the Mississippi River which has laws providing for mutual companies, under which have been organized any companies of any wide reputation. In

addition, there is no state, with the exception of Minnesota, which has a law providing for the admission of substantial mutual companies of other states, except when those companies are so large they shall have accumulated over \$200,000 of surplus, which is the capital required by a stock company. The exception to this rule is Missouri, where the insurance commissioner has acted contrary to the reading of the law and "split the difference," by requiring a company to have financial assets five times as great as required by states east of the Mississippi River. The result has been that there is more insurance rate agitation in nearly every state west of the Mississippi River than in all of the states to the east.

This defect is not due to the indifference of the people, but largely from inability to have the laws modified and good mutual companies authorized, because the insurance legislation is dictated by the stock companies' lobby. Property owners, particularly the millers and grain dealers, have paid little attention to the situation, but have patronized the mutual companies of other states, organized in their interests, and there is no real benefit in having foreign companies authorized to do business in their states; for when a company is authorized in any state it has to pay taxes of from 2 per cent to 5 per cent to the state, which to that extent reduces its dividends to policyholders. The only benefit to the property owner is that in the event of a loss and a disputed settlement, he could file his suit in the home state of the company, while if it were authorized in the state where the risk was he could bring suit at home. The necessity of using this benefit is exceedingly remote, however, and not to my knowledge has the fact of a mutual company not being authorized ever been used by the companies, nor has it been a hindrance to the policyholder in recovering his money.

Nevertheless there would be an advantage of having in every state a law to authorize good mutual companies of other states, for the stock companies are continually using every legitimate and illegitimate influence to defeat mutual competition. For illustration, a few years ago they had passed, in Kansas, a law to tax the property owner, I believe 10 per cent of the premium, if he used a mutual company of any other state. This was a problem to the property owner, as he had to pay the tax, which increased his cost for insurance. However, the millers' mutuals took up the matter and through a suit brought against Thos. Page of Topeka had the law declared unconstitutional. Recent reports to the insurance papers are to the effect that the insurance department of the present Oklahoma Territory proposes to arrest and fine the representatives of every mutual company that can be found doing business there; and it goes even further to include the adjuster, who is in the territory for the purpose of settling and paying to its citizens money that will offset the misfortune of a loss. An effort to molest the adjusters and deprive the citizens of a good settlement was tried in Colorado by the stock companies and defeated.

The fight in four legislatures of Indiana to authorize the admission of mutual companies of other states under the same laws that had been in force in the surrounding states of Ohio, Michigan and Illinois, and with the backing of four good, strong mutual companies in Indiana, has demonstrated to the writer that it is almost impossible to get the old laws of other states modified to that extent. It has, therefore, occurred to the directors of the Grain Dealers' National Mutual Fire Insurance Company and the matter will be brought to the attention of the other good mutual insurance companies' officers—that as long as the citizens of Oklahoma are already large patrons of those companies, they can, when the new laws are made for the state, have introduced a bill for a good law for the organization of mutual companies in Oklahoma, and for the admission of other mutual companies. However, the people will find the stock companies' lobby advising the makers of the new laws not to provide for good mutual insurance and that they will use every argument against any such law. It is, therefore, up to the citizens of Oklahoma to act at this time and bring enough pressure to bear to have such laws enacted.

The president of the company named above, H. N. Knight, will make a visit to Oklahoma to confer with leading citizens on the subject; but he or that company can do but little in getting through the law. The advice that will be given by him will be to adopt the laws of Ohio, both for the organization of mutuals and for the admission of outside companies. The Ohio laws are recommended because they have been in force for a number of years; and in the state of Ohio there are none but good mutual companies, some of which are over fifty years old, and there are only about twenty mutual companies of outside states authorized and all are first class. This record of itself should recommend the Ohio law, but the stock companies' lobby will claim that it will mean the admission of a lot of wildcat mutuals, and

they will try to have the conditions made so stringent that good mutual companies cannot be organized in Oklahoma nor will there be any number of outside companies that could and would comply with the law.

CROP REPORTS

Wheat is reported as looking good in Michigan.

Early in November 60,000,000 bushels of wheat was considered a fair estimate for the North Dakota yield. It is all of good quality and much cleaner than in former years.

The Market Record finds the total yield for wheat, October 25, in Minnesota and the Dakotas, to be 142,918,800 bushels of spring wheat and 45,000,000 bushels of durum wheat.

George B. Ellis, secretary of the Board of Agriculture of Missouri, is authority for the statement that 86 per cent of the corn throughout the state was saved from frost. The rest, late corn, was cut for fodder.

Secretary E. J. Smiley of the Kansas Grain Dealers' Association has issued a statement estimating that Kansas has raised 70,000,000 bushels of good milling wheat, that 57 per cent of it has already been marketed and 82 per cent thrashed.

Frank O. Fowler, secretary of the Winnipeg Grain Dealers' Association, figures the crop yield for Manitoba and the territories at 86,304,000 bushels of wheat, 75,358,000 bushels of oats, 17,650,000 bushels of barley and 629,000 bushels of rye.

Doane Robinson places the average yield of oats for South Dakota at 41 bushels per acre. There were 1,249,391 acres devoted to this crop, and the total yield was placed at 51,310,017 bushels. Minnehaha County leads in both acreage and yield.

The Ohio Department of Agriculture, under date of November 1, reports: "The area of wheat sown this fall for next year's harvest is estimated at 2,036,129 acres, or one per cent less than that reported one year ago. Corn prospects are reported at 102 per cent, a decline of two points from the estimate of a month ago. There is some complaint of mold in the shocks."

Joseph H. Stubbs, chief of the Bureau of Statistics of Indiana, has issued a report showing the wheat yield is over 40,000,000 bushels, a gain of 13,000,000 bushels over 1905, and the best crop in ten years. The average yield was 16.91 bushels. The corn and oats crops are smaller than last year, the former being 165,000,000 bushels and the latter 49,727,767 bushels. Corn yielded 41.06 bushels per acre and oats 27.83 bushels to the acre.

An interesting table is given by the Chicago Record-Herald showing the corn crops of the last six years and the proportion of each carried over from each of the five years preceding 1906:

	Carried over Nov. 1, bu.	Pct. of crop.	Total crop, bu.
1906.....	119,000,000	4.4	2,881,000,000
1905.....	81,500,000	3.3	2,708,000,000
1904.....	81,000,000	3.6	2,467,000,000
1903.....	131,000,000	5.2	2,244,000,000
1902.....	29,000,000	1.9	2,523,000,000
1901.....			1,522,000,000

Yields of corn in the states of surplus production were:

	1906, bu.	1905, bu.	1904, bu.
Ohio	128,000,000	112,000,000	100,000,000
Indiana	184,000,000	187,000,000	143,000,000
Illinois	347,000,000	383,000,000	344,000,000
Missouri	194,000,000	203,000,000	152,000,000
Kansas	204,000,000	193,000,000	135,000,000
Iowa	357,000,000	305,000,000	303,000,000
Nebraska	277,000,000	264,000,000	261,000,000

Total1,691,000,000 1,647,000,000 1,438,000,000

The hay crop of the last three years and the average yield per acre is given below. An average of the ten years preceding 1906 was 58,653,000 tons:

	Yield per acre, tons.	Tons.
1906	1.35	52,650,000
1905	1.54	60,532,000
1904	1.52	60,696,000

In the November report of the bureau of statistics of the United States Department of Agriculture, last year's record breaking corn crop is found to have been exceeded this year by 173,000,000 bushels. The hay crop is 8,000,000 tons short of last year's and 6,000,000 tons short of the average of the ten years preceding. The oats crop was previously shown to be 90,000,000 bushels short of that of 1905. The report follows: The preliminary

returns on the production of corn in 1906 indicate a total yield of about 2,881,096,000 bushels, or an average of 30.2 bushels per acre, as compared with an average yield of 28.8 bushels as finally estimated in 1905, a ten-year average of 25.2 bushels. This and other preliminary estimates of yield made to-day are subject to revision and correction in the final estimates. The following table shows for the twenty-five principal corn states the preliminary estimates of average yield per acre in 1906, with the final estimates for 1905 and the mean of the averages for the last ten years in bushels.

	Nov., 1906.	Final, 1905.	10-year average.
Illinois	36.1	39.8	34.5
Iowa	39.5	34.8	32.4
Nebraska	34.1	32.8	28.0
Kansas	28.9	27.7	22.0
Texas	22.5	21.3	17.7
Missouri	32.3	33.8	27.4
Indiana	39.6	40.7	34.0
Georgia	12.0	11.0	10.5
Kentucky	33.0	29.7	25.5
Tennessee	28.1	24.6	21.9
Ohio	42.6	37.8	34.8
Alabama	16.0	14.8	12.6
North Carolina	15.3	13.9	13.4
Arkansas	23.6	17.3	17.8
Mississippi	18.5	14.3	14.7
Indian Territory	33.6	32.7	25.9
Oklahoma	32.9	25.3	22.1
South Carolina	12.2	10.9	9.5
Virginia	24.3	23.4	21.0
South Dakota	33.5	31.8	25.8
Minnesota	33.6	32.5	29.1
Wisconsin	41.2	37.6	33.2
Pennsylvania	40.2	38.9	34.5
Louisiana	17.2	13.7	16.3
Michigan	37.0	34.0	32.2
United States	30.2	28.8	25.2

The general average as to quality is 89.9 per cent, as compared with 90.6 last year, 86.2 in 1904 and 83.1 in 1903. It is estimated that about 4.4 per cent of the corn crop of 1905 was still in the hands of farmers on November 1, 1906, as compared with 3.3 per cent of the crop of 1904 in farmers' hands on November 1, 1905, 3.6 per cent on November 1, 1904, and 5.2 per cent on November 1, 1903. The preliminary estimate of the average yield per acre of hay is 1.35 tons, against an average yield of 1.54 tons, as finally estimated in 1905, 1.52 tons in 1904, and a ten-year average of 1.44. The average as to quality is 89.9 per cent, against 89.8 one year ago, 92.7 in 1904 and 91.3 in 1903.



IS THIS THE CASE IN THE NORTHWEST?

Scarcity of cars is said to be the reason why receipts in the Northwest so far on this crop have been so much under a year ago, but some say the light movement is because the farmer is not satisfied with prices, and only those that are obliged to are selling, while others claim the crop is much smaller than the government makes it. At any rate the American farmer is a very important person in this country, and of late years he has realized it. Newspapers tell of a farmers' organization that intends to hold their grain for certain prices, but we doubt very much if that plan ever materializes, and if they did agree to do such a thing the attorney-general could get after them. We have enough trusts now without having a farmers' trust, but of course we don't blame the farmer for getting all he can for his products but the question is, are the farmers holding the wheat in the Northwest; is the crop short, or are the light receipts caused by scarcity of cars?—Zahm & Co., November 3.

The Brockton, Mass., milk men, who get 7 cents a quart for their milk, say they can't make money because the price of hay and grain is so high. The grain men lay it to the car shortage.

At the regular weekly meeting of the Salt Lake Grain Dealers' Association, at the Commercial Club, on October 11, officers for the ensuing six months' term were elected as follows: President, William B. Hughes; first vice-president, Henry Blood; second vice-president, C. H. Miller; secretary, D. H. Nolder; treasurer, A. H. Vogeler.

OBITUARY

J. A. Kearney, a well known grain dealer of Nebraska City, Neb., died October 20, of catarrh of the stomach, after a comparatively short illness. He was 52 years of age and is mourned by a widow and four children.

John B. Rhines, who formerly conducted a grain business at Quincy, Mass., but who has recently resided at Weymouth, dropped dead at the latter place one day early last month, having reached his sixtieth year. He leaves a widow to mourn him.

Abram Mather, who, with his son, erected the first elevator in Rushville, N. Y., as well as the first flour mill, died in his eighty-fifth year after a brief illness. He passed the greater part of his life in Middlesex and Potter. A wife and a son and daughter are left to mourn him.

Malcolm Early, a prominent young business man of Waco, Texas, senior member of the grain commission firm of Early, Foster & Co., died of typhoid fever October 10, but a few months after the death of his young wife. He was twenty-eight years of age and was married to Miss Polk of Corsicana but two years ago.

F. B. Grover, a grain dealer and farmer prominent on 'change at Milwaukee, died of heart disease at his home in Rolling Prairie, Wis. He was ill for two years or more, but his death occurred quite unexpectedly, November 1, following an eventful day on the floor of the Chamber of Commerce, where he was often seen. A son and two daughters survive him.

Alphonso Gooding, "the grand old man of Rochester," died at Rochester, Minn., of diabetes. He was seventy-seven years of age, and for forty-one years had lived in Rochester. He was for years engaged in the mercantile business but gained his fortune in the grain firm of the G. W. Van Dusen Co. He was once treasurer of Olmstead County. A wife and five children survive.

Stephen M. Grant, a prominent grain dealer of Boston, Mass., for many years, died at his home in Brookline, on October 19. He had been in ill health for about two years. Mr. Grant was a native of Maine, but had spent the greater portion of his life in Boston. He received his early education in the Boston public schools and at the Bridgewater Normal School. He later organized the business with which he has been connected for more than 30 years. His wife and one son survive him.

George Lambert, a grain dealer of Anderson, Ind., died October 19 at the home of his son, at the age of 81 years. Mr. Lambert went to Anderson with his children about ten years ago from Union City, where he passed the most of his life, and was one of the well-known men of that community. He was a large dealer in grain and timber for more than twenty years. For the last year he has been blind. His wife died four years ago. Shortly thereafter he divided his large estate among his children.

John J. Price, a prominent retired grain dealer of Bloomington, Ill., and former sheriff of McLean County, was instantly killed during the afternoon of October 7, by an Illinois Central passenger train. Mr. Price resided a mile south of town near the crossing of the Illinois Central and Big Four railroads. While crossing the track of the former he failed to note the approach of the fast passenger train and was struck with great force. His body was hurled some distance along the right-of-way and death was instantaneous. Mr. Price was one of the most widely known men as well as one of the oldest in the county. He was 83 years of age, having been born in Kentucky in 1823. He went to McLean County in 1833 and was the first man to embark in the business of dealing in grain there. In 1864 he was elected sheriff of the county and served four years. He is survived by his wife.

Dr. A. M. Moore, professor of agronomy of the College of Agriculture of Wisconsin University, has developed a species of Indian corn that yielded 150 bushels to the acre at the station. This is more than twice the average of corn in Wisconsin.

Within the last fifteen months the Kansas Railroad Commissioners have heard five important freight rate cases, the coal case, the salt case, the grain case, the hardware case and the grocery case. In every case passed upon by the board a reduction of rates was ordered ranging from 5 per cent on grain to 34 per cent on salt. As the grain shipped in Kansas amounts to 20 per cent of the tonnage of the state, a reduction of 5 per cent amounts to about \$400,000 annually.

HAY AND STRAW

A Mr. Barnada and a Mr. Bowman are building hay sheds at Polk, Ohio.

Montana's hay crop is 20 per cent short. It is selling at \$15 per ton.

Isaac Johnson will engage in hay buying and shipping at Sturgeon Bay, Wis.

H. S. Philbrook will open a wholesale hay and grain house at Los Angeles, Cal.

The hay crop of Southern Berkshire, Mass., was the most important one this year.

Crisler & Hovey are building a hay warehouse 50x96 feet in size, at Rice Lake, Wis.

The next annual convention of the National Hay Association will be held at Niagara Falls.

Hay dealers of Negaunee, Mich., report a shortage and prices have advanced accordingly.

The annual banquet of the New York Hay Exchange Association will be given at the New Astor on November 24.

The Interior Warehouse Co. of Dayton, Wash., has been paying \$14 a ton for the twenty cars of hay it has shipped.

L. D. Montgomery lost 1,250 bales of Johnson grass hay in a fire which destroyed his hay shed at Cleburne, Texas.

Samuel Gannett's hay warehouse at Milton, Mass., suffered a fire loss estimated at \$8,000 on building and stock, October 15.

Two hundred tons of hay owned by Jesse W. Crosby and W. E. Holyoak were burned recently at Cowley, Wyo., on the Big Horn property.

Hartel & Martin of Pottersville, Mich., have completed a new hay warehouse at Charlotte, to which place they have moved their headquarters.

Idaho correspondents say the timothy hay crop is 40 per cent short. Rotation of crops, high oats last year and a hot, dry summer are held responsible.

C. H. Ferner's Sons, shippers of hay and grain, have abolished their office at New Castle, Pa., and will in the future conduct their business at Amboy, Ind.

The schooner Elgin, with a cargo of hay and coal valued at \$5,500, was blown to pieces in a gale on Lake Superior, near Grand Marais, Minn., October 29.

Bids for the army supply of hay and oats at Portland, Ore., were answered by three dealers. Albers Bros. offered to furnish 5,500 tons of hay for \$19.40.

About 8,000 bales of hay were burned in A. M. Burch's warehouse at Gainesville, Texas, on October 26. The loss is estimated at \$9,000, with \$1,200 insurance.

The Horace Ingersoll Co. of New York was the successful bidder for filling the contract for hay for the United States Army in Cuba, furnishing 2,000,000 pounds.

The state board of railroad and warehouse commissioners of Missouri may appoint John O. Winn, supervising grain inspector at St. Joseph, as hay inspector for that place.

Joseph Bearse of Dayton, Ohio, has brought suit against his partner in the hay business, H. Jacobs, for an accounting, dissolution of partnership and the appointment of a receiver.

Hubbel & Kent, hay dealers in New York, have dissolved. John H. Hubbel having left the business for Oscar Kent to conduct. Mr. Hubbel will open new offices at 601 West Thirty-third Street.

Bids will be received until November 15 at the Department of Agriculture, Forest Service, Washington, D. C., for the erection of a hay barn on the Wichita game preserve, Oklahoma City, Okla.

Oswald Benninghoven of Long Island, Kan., contemplates an alfalfa meal plant at Sunnyside, Wash., providing he is guaranteed a certain tonnage each year. He proposes to start the mill by January 1.

P. L. Lunch & Co. of Manhattan, N. Y., have been incorporated to deal in hay, straw and grain. The capitalization is \$25,000 and the incorporators are P. L. Lynch, G. M. Lynch, New York; A. Eggert, Hoboken, N. J.

At its monthly meeting November 1 the Chicago, Ill., Hay Receivers' Association discussed at length the problems presented by the embargo against hay by Western lines during the present car scarcity. All of the stations on the St. Paul and North-Western lines have been instructed to accept no hay for shipment to Chicago. The day's receipts were only 16 cars, while an average daily

consumption in the city alone is between 60 and 70 cars. Local stocks of hay are running very low and prices are high.

In some parts of Norway, where the rainfall is excessive, it is the custom of the farmers to build long fences in rows reaching across the wide hayfields over which the new cut hay is hung out to dry on damp days or at night.

I. Smith, a farmer near Kennewick, Wash., has cut and stacked his fifth crop of alfalfa. It, however, was not as heavy as the preceding four. The average yield for the season was 12½ tons, which was valued at \$8 per ton or \$100 per acre.

L. W. Leavenworth of Seattle, Wash., who is quite prominent in the hay trade, states the car shortage is the principal factor against the hay market there, though the crop is somewhat short. As a consequence hay is already selling at a high price.

After forty-six years of continued activity, Mr. John Kerwin, of John Kerwin & Son, Palmer's Dock, Brooklyn, N. Y., owing to failing health, withdraws from the firm and hands over to his son the business, which will be styled as John Kerwin's Son.

The receipts of No. 1 timothy at Pittsburg are about sufficient to supply the demand and there is no change in the price since our last issue. The car situation seems to be a bit easier in Ohio, but is unchanged in Michigan, so we are informed. Billings from Ohio have increased quite a little during the last ten days. The general tone is steady, with invoices and billings showing a good fair supply for immediate wants. Sentiment here is in favor of a steady market, on account of the car situation, which does not seem to be generally unchanged.—Hay and Grain Reporter, November 9.

T. D. Randall & Co., Chicago, report prices of hay November 12: Choice timothy quotable today \$17 to \$17.50. No. 1 \$15.50 to \$16.50. No. 2 \$14 to \$15. Good No. 1 mixed hay \$13 to \$14.50. Heavy mixtures and lower grades \$10 to \$12.50. Rye straw \$8.50 to \$9. Oat and wheat straw \$6.50 to \$7. Illinois, Indiana and Wisconsin upland prairie \$9 to \$10. Ordinary feeding prairie \$8 to \$8.50. Packing hay \$7 to \$7.50. Iowa, Minnesota, Nebraska and Arkansas prairie hay \$12.50 to \$13. Choice No. 1 \$11 to \$12. Lower grades \$9.50 to \$10.50. Kansas and Indian Territory choice prairie hay \$14 to \$14.50. No. 1 \$12.50 to \$13.50. No. 2 \$11 to \$12. Lower grades \$9 to \$10.50.

It is understood the Bureau of Plant Industry at Washington, D. C., is investigating the shrinking of hay from the time it is cut until it is ready for the consumer. The investigation begins when the hay is cut in the different stages of ripeness, cured in the swath, windrow, or packed in the open shed or hay mow. The shrinkage will be determined at intervals of a month and other periods. The amount of moisture lost when baled will also be figured out and the loss in weight of hay during transit will also be determined. An elaborate study of climatic conditions is also under way. This investigation is preliminary to the passage of laws which will govern the allowances for shrinkage of hay.

The committees appointed by the New York Hay Exchange Association to carry on the work so well begun are as follows: Railroad Committee—Wm. J. Overocker, chairman; F. Williams, E. D. Miner, John E. Murray, Ed. Vreeland, George M. Dickerson. Quotation Committee—George E. Van Vorst, chairman; Fred Williams, James Pardon, J. M. Hait, N. A. Fuller, Charles Cassidy. Arbitration Committee—O. K. Linabury, chairman; Charles La Rue, Henry Hotaling. Rules Committee—A. A. Hanks, chairman; Perry Hatch, F. A. Middlewood, Charles B. Morris, T. P. Huffman. Membership Committee—F. D. Dusenbery, chairman; Walter Pratt, A. F. Fisher. Terminal Committee—Charles J. Austin, chairman; E. A. Dillenbeck, Frank Williams, Wm. Hasbrouck, James M. Hait, W. C. Bloomingdale, Fred Slingerland.

The price of hay for some time past, says the Montreal Trade Bulletin, has been steadily advancing on both sides of the Atlantic, due to a short crop in England, France and Canada. That Canadian hay is much esteemed in England is demonstrated by the fact that in the leading markets there, Canadian hay brings more money than the hay grown in Great Britain. This is why there has been such a demand for our hay in Glasgow, notwithstanding that Scotland has a large crop this year, in contrast with the shortage in the south of England. There is considerable speculation as to the future price of hay, some maintaining that we have not yet seen the highest point, although values have already advanced \$4.50 to \$5 per ton from the lowest, No. 2 on track being quoted at \$12 to \$12.50 per ton in car lots. On the north shore and in the Ottawa Valley farmers have not enough hay for their cattle, and are compelled to buy outside in order to satisfy their home requirements; a

condition of things that has not been experienced for years, as the North Shore has invariably been one of the great hay producing areas of Canada.

Fire destroyed 3,000 bales of new hay stored in a warehouse owned by W. R. Cole near Dallas, Texas. It started from spontaneous combustion caused by a quantity of new hay being packed on top of old hay. The loss is \$500 on the building and \$700 on the stock.

Because hay is so scarce in Eastern Ontario, the Ottawa Valley and in sections of the north shore the farmers are said to be selling portions of their herds of cattle in order to save the expense of wintering them. The Montreal Trade Bulletin, in a recent issue, says: "We have heard of a number of carloads of cows being disposed of in this way during the past week, and if the colder weather that set in at the beginning of this week be continued, it will materially curtail the supply of milk and add to the number of factories already closed for the season. The English make is known to be short, and it is expected there will be none too many Canadian cheese for the requirements of Great Britain between now and next spring, although at what price is fair subject for the bulls and bears to speculate on."

Freeman Bros. & Co., Chicago, report November 12: Timothy.—Strong and active market, with upward tendencies, prevails, as conditions are unchanged. Arrivals are very small and all grades of sound hay much wanted. Exceptionally well do the various kinds of mixed hay sell, and for which there is a sharp demand at high prices. The rescinding of the "embargo" order on the C. & N. W. and C. M. & St. Paul railroads ought to give shippers on these lines an opportunity from which they were barred for quite a time. Get your shipments en route quickly, as the early arrivals will find a most excellent market here and well worth your making special effort. Prairie.—Wild hay, while not the leader, is following close up to tame hay and rules firm and active, with scant offerings. Upland prairie is, of course, the hay most wanted and commanding top prices, but all kinds are meeting a bare market, selling readily and to good advantage. Our market is certainly most inviting, and which you can improve to your profit by forwarding your shipments promptly. Straw.—Limited offerings and good inquiry meet all arrivals, and rye, oat and wheat are all firm and in active request. Government Report on Hay.—Issued Saturday, November 10, 1906, at 2 p. m., reads: "Yield per acre 1.35 tons, against 1.54 tons last year, when the crop was 60,531,611 tons." These figures indicate a shortage of about 12½ per cent, or one-eighth less hay than last year, and which equals a crop of about 53,000,000 tons. This shortage will be offset by greater economy in hay consumption, as well as the substitution of corn fodder, straw, etc. Already hay values have more than kept pace with the shortage in the crop, but think much of this advance owing to scarcity of cars rather than a scarcity of hay.

OUR CALLERS

[We have received calls from the following gentlemen prominently connected with the grain and elevator interests during the month.]

Jas. McGrew, Kankakee, Ill.
W. H. Likens, Jackson, Mich.
E. C. Carroll, Reedsburg, Wis.
Thos. W. Scott, City of Mexico, Mexico.
A. T. Ward, of Townsend & Ward, Buffalo, N. Y.
S. F. Evans, of Moulton & Evans, Minneapolis, Minn.
A. T. Sitterly, representing The S. Howes Co., Silver Creek, N. Y.
S. W. Strong, secretary Illinois Grain Dealers' Association, Pontiac, Ill.
S. J. McTiernan, St. Louis, Mo., representing Huntley Mfg. Co., St. Louis, Mo.
J. W. T. Duvel, Bureau of Plant Industry, Department of Agriculture, Washington, D. C.

The average carload of flax this year at Duluth is about 1,100 bushels. One elevator company reports an average of 998 bushels, another 1,200 and another 1,100, but the average is about as stated, 1,100 bushels.

The Canadian Pacific Elevator B, at Ft. William, made the loading record for the lakes on October 28, when 198,000 bushels of wheat were run into the hold of the S. S. Matthews in one hour and fifty-seven minutes, or at the rate of 1,095 bushels per minute.

FIRES--CASUALTIES

Spencer & Harriett's grain warehouse at Newbern, N. C., was recently damaged by fire.

Fire recently caused a \$4,000 loss to Galbraith & Cain's grain warehouse at Forest City, Mo.

The Interstate Grain Co.'s elevator at Atwater, Minn., was damaged by fire of unknown origin on November 4.

The flouring mills at West, Texas, owned by the West Mill & Elevator Co., were damaged by fire to the extent of \$5,000.

P. I. Fransoli & Co.'s grain warehouse at Tacoma, Wash., was recently damaged by fire, the loss, however, being covered by insurance.

Recently the elevator at the mill at Bathgate, N. D., started to move north, then settled and got out of whack so the conveyor wouldn't work.

Recently the big steamer C. S. McGouth, loaded with 150,000 bushels of oats from the Cargill Elevator at Green Bay, Wis., ran aground at Gull Island.

An incendiary fire caused \$11,500 damage to the elevator at Milton, Mass., owned by Samuel Garrett, on October 15. A large amount of grain was consumed.

The elevator at Lake City, Minn., owned by the Western Elevator Co., had a narrow escape from being burned at the time Tennant & Hoyt's plant was destroyed.

The grain elevator at Scarth Junction, Man., which has been filled with grain, was on the verge of collapsing, October 26, when the danger was discovered and supports placed.

Sparks from a passing locomotive caused a fire which destroyed the elevator adjoining the Atlas Flour Mill at Brainerd, Minn., on October 19. The loss approximates \$5,000, fully covered by insurance.

J. A. Scobell's grain elevator at Cape Vincent, R. I., was burned early last month. It was filled with grain and other products and was valued at \$5,000, fully insured. The building has stood for more than forty years.

About 18,000 bushels of wheat were dumped unceremoniously into the open, on October 30, when the wheat bin of the O. & M. Co. at Manfred, N. D., burst out at both ends. Repairs were made after part of the grain had been taken away.

R. M. Kennedy's elevator at New Rockford, N. D., burst open October 12, and about 2,500 bushels of flax escaped to the ground. Some 600 bushels were blown away by a high wind and the loss reaches over \$700. Repairs have been made to the building.

Fire destroyed the Peavey Elevator at Salem, S. D., together with 12,000 bushels of grain that it contained, on October 13. The building was valued at \$3,500 and the grain at \$6,000. It is thought the fire was started by hoboos. The company will rebuild at once.

A serious fire at the Waukesha Grain & Produce Co.'s elevator, Waukesha, Wis., was averted October 24, by the good work of the fire department. The flames started in the engine room and quickly found their way up to the roof. The small loss was covered by insurance.

Gilbert A. Bigelow's elevator at Princeton, Mass., was struck by lightning and burned on October 9, at a loss of \$5,900 with \$4,000 insurance. The building was 100x40 feet in size and three stories high. It contained 50 barrels of flour, 2,500 bushels of oats and a carload of hay.

Four firemen were injured and about \$10,000 worth of damage done at a fire in Lynn, Mass., October 28, which nearly destroyed the grain and hay warehouse of Henry F. Hunt. The injured men were in the second floor when it gave way and fell through to the ground floor.

Several thousand bushels of grain were burned in the fire which completely destroyed the Farmers' Elevator at Tuscola, Ill., on October 22. The loss will reach \$10,000, there being but \$600 insurance on the building, which was 12 years old. About 1,500 bushels of grain was lost.

The fire which on October 20 destroyed the 200-barrel mill leased by the Fulton Milling Co. of Sioux Falls, S. D., carried with it the elevator, which was an iron-clad frame structure, 30x40 feet in size and about four stories high. The property was owned by the Cascade Milling Co.

The elevator at Cedar Creek, Kan., belonging to B. D. Williams, burned to the ground recently. The fire was caused by the explosion of the gasoline engine. James Wilson, the overseer, had just oiled the engine and stepped outside when the explosion took place. Soon fire was discovered

overhead in the engine room, but they were unable to check it in any way. The elevator was almost new and contained six thousand bushels of grain at the time it burned.

A fire supposed to have been started by an incendiary, burned the Great Western Elevator at Echo, Minn., on the night of October 20, together with about 4,000 bushels of wheat and two cars filled with flour and barley. About 40 tons of coal belonging to the company were also burned.

One day, the latter part of October, a storehouse, forming an addition to the Runberry Elevator at Ong, Neb., burst open and some 14,000 bushels of grain rolled out from two sides of the structure. A force of men assisted in loading it into cars for shipment. The loss was about \$200.

A granary belonging to Joseph A. Readers, a farmer of Nelson County, N. D., containing several thousand bushels of wheat, was burned recently at a heavy loss. Congressman Gronna had 1,000 bushels of wheat stored in the building. The carelessness of an employee is given as the cause of the fire.

Two of the bins in the Traux Elevator at Plankinton, S. D., went down recently, just as Manager Earl was preparing to load a car, and 1,500 bushels of flax were precipitated into the pit beneath. The pit being partially filled with water, the damage to the grain will be considerable, especially with flax worth 92 cents in Plankinton.

Two elevators containing 80,000 bushels of wheat were destroyed at Edmore, N. D., on October 10, by fire of unknown origin. The M. & N. Elevator containing 40,000 bushels of wheat and the Farmers' Elevator with the same amount were lost as were three box cars loaded with grain. The damage is estimated at \$50,000.

A fire starting in the engine room destroyed the West End Elevator at Antwerp, Ohio, owned by Henry Harris & Son, together with its contents, on October 23. The brick structure adjoining, which housed the local electric light and power plant, was saved, but was temporarily out of business. The elevator was insured for a small amount.

Fire originating in the dust room destroyed the National Elevator at Kemp, Ill., on the evening of November 5. About 5,000 bushels of corn and 6,000 bushels of oats were consumed, the firemen managing to save 10,000 bushels of the latter. The loss is estimated at \$5,000 on the building and \$6,000 on the grain, partly covered by insurance.

Incendiarism is believed to have been the cause of the fire which burned the elevator at Lane, Ill., on the evening of October 19. The loss is estimated at \$2,500, with a small insurance. It was owned by Emerson Hartsock of Lane and Edward Jenkinson of Clinton, the 2,500 bushels of corn and a large quantity of oats consumed, being the property of the former.

Some 4,500 sacks of wheat were lost by the sinking of the steamboat Pringle in the Columbia River while passing the rapids below the mouth of the Entiat River near Entiat, Wash. The steamer was en route to Seattle. The Pringle was the largest boat on the upper Columbia and has been in service since 1896. The heirs of Alexander Griggs were the owners.

An overheated journal was responsible for a fire which attacked the elevator belonging to the Great Western Cereal Co. at Muscatine, Iowa, on October 22. The fire was discovered in the top of the building, but the prompt arrival of the fire department checked its progress, so the greater damage was from water. The building was on fire a few months previous.

The annex to R. Clendening & Co.'s elevator at Wimbledon, N. D., gave way to the pressure recently and about 14,000 bushels of grain had to be shoveled into wagons and loaded in cars. The building is a complete wreck and the driveway was pushed away from the elevator several feet. The loss and expense of rehandling the grain will amount to several hundred dollars.

A fire consumed the elevator belonging to the Crabb-Reynolds-Taylor Co. at Ash Grove, Ind., a station on the Monon Route, on the morning of October 27. The elevator was a new building, with a capacity of 40,000 bushels and contained 24,000 bushels of new oats and 3,000 bushels of corn. The loss is estimated at \$25,000, with \$7,000 insurance on the building and machinery, and the grain was well insured.

Patrick Dolan, foreman of a crew of grain handlers, was smothered to death and Petro Amazio, a fellow worker, who endeavored to rescue him from the wheat pit into which he had fallen, had a marvelous escape from death. The accident occurred in the William Baird Co. Elevator at Brooklyn, N. Y., on November 6. Dolan had fallen into a bin containing 3,000 bushels of wheat and was struggling for his life when Amazio threw him a rope. He pulled his would-be benefactor in and other workmen hearing their cries for help opened

the chutes, dumping the grain into the streets. Soon Amazio's body shot down and the rescuers discovered he was still alive. Dolan was dead when his body came through the chute.

Several thousand dollars' worth of wheat and oats were strewn along the track of the Lehigh railroad for a distance of 200 yards, in Newark, N. J., by a freight train wreck, October 10. Fourteen cars were smashed up when the air brake snapped. The train was running at a fast speed and the cars loaded with grain were all broken open. The loss will be considerable, as much of the grain could not be recovered.

Homer Whitney's new elevator at Eden, Mich., collapsed recently on account of being overloaded. The foundation gave away, precipitating the structure into the basement. The building contained about 800 bushels of beans and a considerable quantity of wheat and rye, which were dumped promiscuously into the basement to become thoroughly mixed. Edenites worked industriously and prevented additional damage.

The Farmers' Elevator at Virden, Man., slid off the foundation on October 21, and the west end dropped about three feet to the ground. Parts of the north and south sides burst open and the center bins fell to the lower floor. Some 27,000 bushels of wheat was shaken out and Simpson Bros., the lessees, will lose heavily both on the grain and the building, in which they were one-third owners. It is likely the elevator, which was poorly constructed, will be rebuilt.

When the elevator at Grand Coulee, Sask., belonging to Joseph Glenn of Indian Head, toppled over, the morning of October 5, several thousand bushels of grain were emptied onto the tracks of the C. P. Railroad. The foundation of the building on the side nearest the tracks, gave way and as the elevator contained nearly 44,000 bushels of grain it caused considerable damage. The railroad furnished cars for immediate shipment and workmen are now jacking the building back into position.

Barnett Bros.' Elevator at Barnett, Ill., burned down October 10. A high wind and inadequate fire fighting apparatus handicapped the firemen so that they were forced to confine their attention to adjoining property. The elevator was valued at \$7,500 with \$5,000 insurance and the contents were of similar value and equally well insured. There were 1,000 bushels of oats, 1,200 bushels of wheat, 800 bushels of corn and considerable other stock. It is thought the fire was started by a spark from a passing locomotive.

An elevator, owned by the Pride Elevator Co. at Havana, Minn., as well as adjoining property, was destroyed by fire on October 15. The blaze originated in the elevator and was caused by a spark from a passing locomotive. It was valued at \$4,000 and was insured for \$2,600, there being but little grain in the plant at the time. It was built seven years ago by a farmers' company, which failed to operate it successfully. Excessive freight rates are now causing the owners to discuss the advisability of rebuilding.

Fire originating in the cupola of the elevator at Tennant & Hoyt's 500-barrel flour mill at Lake City, Minn., believed to have been caused by a spark from a passing locomotive, was responsible for a resulting loss of \$80,000, on October 12. The elevator, with a full capacity of 25,000 bushels, was located at one end of the mill, but owing to the wind the firemen could do nothing, especially as they were handicapped by a deficient water service. The plant was erected five years ago by Robert C. Tennant and Charles G. Hoyt and is likely to be rebuilt.

Adam Rhogus was crushed and killed and Jacob Thayer injured, when a floor of the Iron City Elevator at Pittsburg, Pa., collapsed under the weight of many tons of flour, on October 17. The section of the floor which fell is about 12 by 20 feet, and was supported by wooden strips nailed to the sides of the building. There were no upright supports, and about 100 sacks of middlings weighted down the floor. When the floor collapsed it hinged in the middle and pinned the dead man to the side of the building. The force of the fall was so great that his body was rammed through the third floor of the fallen portion.

On the afternoon of October 16, the Robb-Cargill Co.'s warehouse at Fessenden, N. D., gave way and let out about 2,000 bushels of wheat. It is a small building, with only 2x4-inch studdings, which could not stand the strain and spread out at the bottom, causing the floor to give way in places. The debris, which has been cleared away, came near being burned the night following the accident. The exhaust pipe from the gasoline engine runs out under the warehouse floor and when this broke down it allowed the wheat to pack about the pipe, which soon became heated and ignited the boards near it. The smoke was discovered by Manager Cowin, who made haste to extinguish the flames before it had got under way.

BARLEY AND MALT

Barley receipts at Minneapolis have been about half of what they were last year, while Duluth is reported to be getting 50 per cent of the shipments.

N. L. Wilson of Beloit, Kan., is experimenting with a fall variety of barley supplied by the government. This is the first time a fall variety of barley has been sown in the state.

Burglars entered the office of the Mohawk Milling & Malting Co. at Mohawk, N. Y., the night of October 16. The safe contained no money, but about \$10 was stolen from the cash drawer.

Work has already commenced on the plans for the new plant to replace the Badger State Malt & Grain Co.'s malt house at Waterloo, Wis., which burned recently. The \$45,000 insurance will go a long ways toward the cost of the structure.

Peter Anderson, a farmer living near Wallace, Mich., on the upper peninsula, exhibits the certified statement of a thrashing crew to the effect he raised 8½ bushels of barley from 1¼ acres of land which had been seeded with only two bushels of grain.

The figures secured by Doane Robinson in his advance crop reports give the average barley yield for South Dakota at 30 bushels per acre. There were 913,057 acres devoted to this crop, with a total yield for the state of 24,611,280 bushels. Minnehaha County with 67,442 acres devoted to that crop leads in acreage, and with a total yield of 2,025,260 bushels is far in the lead in total yield.

The John Kam Malting Co. of Buffalo has leased the Stevenson malting plant near Oswego, N. Y., which was run until lately by the Thomas Gordon Malting Co. It is reported that Mr. Gordon is to take charge of the new plant of the American Malting Co. now being built at Buffalo. Wm. Boardman, formerly head maltster for the Gordon Company, is to remain in that capacity for the Kam Company.

Recently the D. Rothschild Grain Co. of Davenport, Iowa, purchased the property of the American Malting Co. at Colehour, a suburb of Chicago, Ill. The property comprises large terminal elevators. The first transfer was from Rollin C. Newton and George R. Turnbull of New York, as trustees, to the American Malting Co. for a consideration of \$75,000. The transfer from the malting company to the grain company was for a nominal consideration.

The United States Government Agricultural Bureau has made arrangements to co-operate with the University of Wisconsin's experimental station, by appropriating \$4,000 to continue and enlarge the work of breeding high grade barley, which for eight years has been conducted successfully by the school. As there are 14,000,000 bushels of barley raised annually in the state it is readily seen that the work of breeding a grade of barley which will yield from five to ten bushels more per acre than ordinary grades is a matter of vital importance to the farmers of Wisconsin. It means an increase of from 2,500,000 to 5,000,000 bushels in the year's crop.

H. J. O'Neill, from 1890 to 1898 the "barley king of the world," and rated in Chicago during that period as worth many millions, died in obscurity on November 7, at Cameron, Mo., of heart disease. Public attention was last attracted to Mr. O'Neill in November, 1899, when his wife was arrested in Montreal, Canada, on complaint of Chicago firms who were her creditors to the amount of \$30,000 for finery. Her husband stood by her and paid the bills. Soon after this the O'Neill fortune was lost. The trader tried to re-establish himself at Winona, but failed. At the time of his death he was a buying agent for a St. Louis brewery, with headquarters at Cedar Rapids, Iowa.

Strauss, Kuhn & Co. of Mexico City, Mexico, have completed and are operating their new malt house, which has been under construction for a year or more. Mr. Kuhn states the plant will make about 600 bushels of malt per day, more than half the amount consumed in the entire republic. The Galland-Henning Pneumatic Malting Drum Manufacturing Co. had charge of the erection of the malt house. The plant now completed is only half of what the entire house will be, but the second half will not be built for the present. The first half is, however, complete in itself, and is so built that the second half can be fitted exactly into it, being, in effect, a duplicate of the first half. Mr. Kuhn has brought with him from a recent trip abroad a large quantity of German barley which he will plant in various parts of the republic, with the object of testing it for cultivation in Mexico.

He believes that fine barley can be raised in this country, and he will now make an extensive and thorough experiment of the matter. This barley will be planted in about a dozen different parts of Mexico.

IMPORTS AND EXPORTS.

Following are the stated imports and exports of barley and barley malt for the month of September, 1906, and for the nine months ending September, 1906, compared with the same periods of 1905:

Imports—	1906.	1905.
Barley—September, bushels ..	4	2
Value	\$3	\$2
Nine months, bushels.....	2,519	16,266
Value	\$1,543	\$8,232
Exports—		
Barley—September, bushels ..	750,045	1,970,165
Value	\$404,661	\$945,345
Nine months, bushels.....	9,980,811	7,597,349
Value	\$4,916,734	\$3,886,131
Malt—September, bushels	36,895	56,717
Value	\$26,368	\$39,282
Nine months, bushels.....	576,109	413,132
Value	\$393,510	\$284,412

RUSSIAN BARLEY ON A DRY LAND FARM.

On the dry land farm of J. C. Dawes, formerly a leading agriculturist in the famous Gallatin Valley, near Dickinson, N. D., there has recently been conducted a successful experiment in the cultivation of a species of Russian barley produced extensively on the steppes of Russia. This grain differs somewhat from native grain. The head resembles that of wheat, while the kernel also bears a resemblance to the same cereal. Fifty bushels of well-developed grain can be raised from one acre on dry bench land without water. The crop matures in about ninety days; thus it is possible, by early seeding, to avoid the hot, withering sun of the late July and August. This year Mr. Dawes seeded his ground on April 15, and July 15 the reapers were running. Russian barley can be thrashed and used precisely as other grain. However, another idea in which Mr. Dawes is much interested and which he has demonstrated to be successful is the feeding of Russian grain in the straw to live stock, sheep, cattle and hogs. He declares that a ton of barley fed in the straw contains as much nutrition as three tons of the best alfalfa. The straw is tender and sweet, and live stock eat it readily.

MORAVIAN BARLEY FINDS FAVOR.

The California State Agricultural Society is endeavoring to exploit the Moravian or Hanna barley which was first introduced in that state some five years ago. It is said to possess qualities far superior to the common varieties.

August Hagemann of Livermore was the first to plant it in California and has been growing it for five years. He says: "The Hanna, or Moravian, barley has shown more resistance to drouth than the six-rowed common barley. In its normal state it weighs 50 pounds to the bushel; the standard weight of the six-rowed or common barley is 48 pounds to the bushel. The average yield under equal conditions is in favor of the Moravian. It is an excellent feed barley as well as a brewing barley. Its malt shows by analysis to have a larger percentage of extract than chevalier barley. As an export barley for Australia and England it should have a good demand, as this type of barley is almost exclusively used in those countries for malting."

As to the history of the barley, David Fairchild of Washington, D. C., says: "The barley in question was not secured by the American consul in Moravia, but by myself personally while abroad as explorer for the Bureau of Seed and Plant Introduction of the United States Department of Agriculture. I personally talked with the originator of this barley, E. Ritter Proskowetz of Kiwassitz. It is claimed to be one of the best brewing barleys in the world, and is noted for its qualities of early ripening, unusually heavy yields, and special meanness, which latter, together with other qualities of kernel, renders it one of the great favorites among the German as well as the Austrian brewers."

Von Proskowetz claims for the variety a pedigree and says that it was selected as a single plant from some barley which he knew to be of very old Moravian origin. Through careful selections he has been able to bring its productivity up to 3,700 kilos per hectare (about 65 bushels to the acre) and shorten its period of growth by over a week. It is a light straw producer, suited especially to light and sandy loams. Owing to its early ripening quality, it is especially valuable in Hungary, where the hot season occurs in the latter part of July, but after the Hanna barley has so far matured as to be little influenced by it. Owing to its heavy yielding capacity, earliness and high grade as a brewing grain, this variety is driving out all other sorts in Austria, and every year large quantities of seed grain are imported into Hungary.

TRANSPORTATION

Grain men of Duluth, Minn., have been worried over the threatened strike of the railroad switchmen. An agreement is said to have been reached.

Every railroad that runs through Iowa is short of cars. One official is said to have reported his line was 1,500 cars short in the Iowa territory alone.

Reports from Minneapolis dated November 5 are to the effect that the car situation is constantly growing worse and is now more serious than anything faced in ten years.

A large amount of tonnage for winter storage at Buffalo has been chartered at 4 cents. Tonnage so taken for flax exceeds like amount taken in previous years by several hundred thousand bushels.

The Great Northern has announced a rate on carload lots of grain in Eastern Washington of 25 cents per hundred pounds to terminal points, effective November 18. From Republic, Ferry and Curlew to Spokane it will be 15 cents per hundredweight.

Construction trains that were engaged in the double-tracking of the Canadian Pacific Railroad between Winnipeg, Man., and Fort William, Ont., up to the beginning of the after harvest rush of wheat eastbound from Winnipeg, will soon be restored to continue the work throughout the winter.

Grain receivers at Duluth, Minn., have been informed in letters from the country that the Soo line can ship no more grain from Thief River Falls to Duluth over the Great Northern, that road refusing to accept the Soo road business at that point on the ground that it has not motive power enough to handle its own.

The Clover Leaf has announced a through rate on grain from St. Louis, Mo., to the seaboard by the way of Toledo of 18½ cents, to be effective until January 1. Now that it has made this rate its published through rate, grain dealers are bringing a strong pressure to bear to get the railroad to reduce the rate in order to give Chicago an even break with other markets.

The traffic congestion at and east of Buffalo is unprecedented. The effect of the new rule by the railroads refusing grain off the lakes at Buffalo is a body blow at the grain trade, and a thrust at the grain dealers of Chicago, and of Kansas City, Duluth and Winnipeg, as well. By November 1 the railroads had lifted part of the embargo at Buffalo and a few large shipments were moved. The grain dealers say this, however, only slightly remedied the trouble and the matter has been placed in the hands of counsel with a view to an early appeal to the courts.

Southern railroad officials at a recent New York meeting decided upon the following, to take effect January 1: A basic rate will be established from Louisville and Cincinnati to the Carolinas. The rate from Evansville and Cairo will be two cents higher to the same territory. From Memphis to the Carolinas the rate will be four cents lower than from Cairo, and from East St. Louis two cents higher than from Cairo. Basic rates from all grain shipping sections will be made in the same way, and the rates from different points fixed in the same manner. Rates to the Southeast will remain as they are at present with the exception that the shrinkage, which is now three cents, will be reduced to two cents.

DEMURRAGE AND THE MOVEMENT OF FREIGHT.

Very few men connected with the hay and grain trades refuse to pay demurrage when assessed for neglect or delay on their part. But unfortunately, just as well as unjust demurrage rules have been abused by those in authority and position to enforce them. The abuse of demurrage rules is responsible to a great extent for the feeling of animosity in the minds of shippers and receivers against car service associations. Fair, equitable and just car service rules protect the prompt against the tardy, and a reasonable application of same without favor tends to facilitate the prompt movement of freight and results in better and more efficient railway service.

Unreasonable delay in furnishing equipment and in the movement of freight is causing the entire commercial interests of our country incomputable losses, the interest item alone being estimated to be fully \$23,000,000 per year. Then comes the inconvenience, disappointment, loss of business and (last and largest, to the grain trade) the item of depreciation: Off-grades, hot grain, musty hay, etc.,

caused by the unnecessary delay while in transit.

The individual shipper and receiver has been unable to cope with the railway corporations and car service associations, but the Grain Dealers' National Association and the National Hay Association have undertaken negotiation with the railroads to reconcile conditions and secure prompt movement of freight and more efficient railway service. To this end, at the last annual meeting of the Grain Dealers' National Association, this resolution was adopted:

Resolved, That, a committee of three be appointed from the Grain Dealers' National Association who shall invite the secretary of the National Hay Association and the secretaries of the several state grain associations to act with them to represent the grain and hay interests of the United States, and to invite the managers of the transportation companies to join them in a conference relative to the modification and application of car service rules and the adoption of such measures as will facilitate a prompt movement of freight and in such a manner as shall be fair, equitable and just to all parties concerned; said committee to meet as soon as practicable in joint conference and take such action as they deem expedient, and report progress during the year to the secretary of the G. D. N. A. and the result of the year's work at the next annual convention.

In accordance with the above resolution President Goemann appointed the following demurrage committee:

E. W. Seeds, G. A. Stibbens and C. A. Burks (chairman).

It is the purpose of this committee to collect all possible information before it is called together, as they realize they must be able to present facts to the railroad officials, which they cannot contradict. For this reason the committee has prepared the following circular, which the reader or recipient is requested to fill out and return to the chairman at Decatur, Ill., at his earliest convenience, as the committee is anxious to call the joint conference at as early a date as possible.

CIRCULAR.

The secretary of the Interstate Commerce Commission suggests that we "get specific cases, in which alleged improper demurrage charges, or alleged improper rules or regulations made respecting demurrage, have been published; also suggestions with respect to desired changes in rules, regulations and charges," and for this reason, as well as many others, you will kindly be as specific as possible in answering the following interrogatories, giving the incident as fully as possible, as well as the correct movement, day, date, etc. If you do not find space enough to give as complete an answer to any question asked as you think the question will want, please use extra paper, giving number, or quoting question before giving your answer:

1. What car service have you paid during the past two years?
2. Was the delay caused by you, or was it the fault of the railroad company?
3. How much free time were you given in which to load and unload cars?
4. What demurrage rule is being enforced at your station that you think is unjust and unreasonable?
5. When cars are ordered for loading do you receive them promptly?
6. Are cars taken from your sidetrack promptly when loaded?
7. Do your cars arrive at their destination in a reasonable length of time after having left your station?
8. Do you favor reciprocal demurrage?
9. Do railroad agents fail to file your order for cars?
10. Do you file your orders for cars in writing?
11. Have you suffered any losses during the past two years on account of the railways' delay in the shipment of your grain or hay?
12. What suggestion or advice can you give this committee that you think would assist them in securing better and prompter railway service?

Fill out and return to C. A. Burks, chairman, at Decatur, Ill.

The Chicago & Alton Railroad, at the instigation of the Interstate Commerce Commission, has published rules for absorbing certain switching and elevator charges on grain. The railroads will assume up to 5% of a cent per 100 pounds the unloading, transferring and reloading charges on all grain moving over its lines from Kansas City. On all grain shipped by the Chicago & Alton the established charge for cleaning, clipping, mixing or rehandling assessed by elevators at Kansas City against the owner of the grain will be assumed by the Chicago & Alton. On all grain received from connecting lines or elevators on such lines switching, reconsigning and other charges will be assumed by the Chicago & Alton.

PERSONAL

D. L. Anderson of La Rose, Ill., has charge of the elevator at Beloit, S. D.

Floyd Gibbons is now with the Monarch Elevator Co. at Valley City, N. D.

David Heney has assumed charge of the Thorpe Elevator at Osakis, Minn.

E. H. Wilson has resigned as manager of the Illinois Grain Co. at Lstant, Ill.

J. N. Haugen has been installed as buyer for the Star Elevator Co. at Divide, N. D.

A Mr. Camery of Traer, Iowa, is managing the Peavy Elevator at Bigelow, Minn.

John Hoffman of Allentown will operate the H. J. Puterbaugh elevator at Mackinaw, Ill.

George Siem of Elgin, Minn., is manager for the Western Elevator Co. at Minneiska, Minn.

Edward Kraling of Comfrey, Minn., is grain buyer for the Stinchomb Elevator Co. at Carpio, N. D.

G. W. Powell has succeeded A. M. Baldwin as manager of the Updike Elevator at Shickley, Neb.

O. W. Johnson has succeeded George B. Smith as buyer at the Peavey Elevator in Amboy, Minn.

Henning Thorpe of Rockwell, Minn., is now with the Monarch Elevator Co. at Twin Valley, Minn.

Phil Burgess is in charge of the elevator at Fingal, N. D., owned by the Woodworth Commission Co.

E. W. Langer, formerly buyer at the Pacific Elevator in Marietta, Minn., is now with the Security Elevator.

James Hogan of Winnipeg Junction, Minn., is grain buyer for the Security Elevator Co. at Minneapolis.

D. C. O'Brien of Sioux City is the new manager for the M. D. Green Co. at the Thompson Elevator in Hastings, Minn.

A Mr. Christopherson, who was with the Sullivan Lumber Co. at Litchville, N. D., is buying grain for an elevator at Donnybrook, N. D.

L. I. Leeland has retired from the elevator business at Porter, Minn., because the dust proved too strong a factor against his health.

John H. Ward, who for twenty-three years has been in charge of the Quigg-Tanner & Co.'s interests at Atlanta, Ill., will shortly move to Colorado.

Joseph Wrabek has resigned as buyer at the Powers' Elevator in New Prague, Minn., and M. F. Bastyr has been appointed to the vacancy.

George C. Stokes has resigned as manager of the Neola Elevator Co.'s plant at Rochelle, Ill., and has been succeeded by William H. Hines of Lindenwood.

A. L. Strauch, formerly agent for the Federal Elevator Co. at Mayville, N. D., which is closed for the season, has gone to Kieneau, Sask., to take a similar position.

E. M. Knowles of Lynd has taken the management of the Thorpe Elevator at Milroy, Minn. P. Vanderburg of Sherman, S. D., has resumed his duties as traveling auditor.

Earl De Merseman of Alpha, Minn., has gone to South Dakota to take charge of an elevator, the one he has been with at Hazel Run, Minn., for two years having closed.

S. A. Fritz has severed his connection with the Shepherd Farmers' Co-operative Association, at Cooperstown, N. D., and is managing the Winter & Ames Elevator at York, N. D.

Will Berger of Plattsmouth, Neb., who has been in charge of the Duff Grain Co.'s branch house at Lawrence, Neb., has been appointed auditor for the firm, with headquarters in Nebraska City.

W. K. McNaught, president of the American Watch Case Co. of Toronto, Ont., claims he was responsible for the first shipment of grain from the west of Canada. He first visited Winnipeg in 1876 when it was a town of only a couple of thousand inhabitants, and commenting on this he recently said: "I thought then what most of us think now, that we have the granary of the world to the west of us. As a matter of fact, it was I who caused the first shipment of wheat from this country. During my visit thirty years ago, I came across 500 bushels of red Fyfe wheat at Higgins, Young and Peebles, and was so taken with it, as regards size, quality and color, that when I went back to Toronto, I induced Mr. Steele, of the Steele-Briggs Co., who are the chief seed men in Canada, to buy it. He came up and purchased it and got it down before navigation closed. That was, as far as I can learn, the first shipment of wheat from the West. Of course,

at that time every pound of breadstuff in Winnipeg was imported, and the trip from Toronto occupied 12 days instead of 43 hours."

C. B. Jenkins, manager of the Marion Milling & Grain Co., Marion, Ohio, has resigned after a number of years in the trade to engage in the elevator insurance business.

Frank Kendall, formerly bookkeeper at the Merchants National Bank of Fargo, N. D., has been appointed accountant and traveling auditor of the line of elevators being constructed by the Saskatchewan & Western Elevator Co., Ltd.

E. A. Forbes, formerly associated with his brothers, T. M. and W. A. Forbes, in the Forbes Elevator Co. at Topeka, Kan., has been appointed accountant of the Internal Revenue Department of the United States government.

W. H. Reed of Tacoma, a member of the State Grain Commission, who accepted the management of the Farmers' Grain & Supply Co., a few weeks ago, has resigned, and is succeeded by N. M. Munger. Mr. Reed has returned to Tacoma.

G. H. Homme, local agent for the Great Western Elevator Co. at Echo, Minn., was sandbagged while in the elevator the evening of October 18 and was unconscious for more than an hour. On the Saturday following the building was burned by an incendiary.

WEIGHING AT BALTIMORE.

The weighing committee of the Baltimore Chamber of Commerce is issued a circular letter of which the following are the most important features:

"Statistics show that a large percentage of shortages is directly traceable to defective or badly coopered cars, and that in many instances, these losses could be obviated if shippers would adopt a rule by which all cars would be carefully examined before and after loading, and a detailed report made of such examination. Before cars are allowed to be moved from loading track they should be properly sealed and the seal numbers kept for record. This information is most valuable in the filing and prompt collection of claims against the railroads for losses in transit.

"When you call to mind the great increase in the capacity of cars in recent years, and corresponding strain upon every part of their construction, because of the heavier loads, and especially the liability to leaks around the doors, one must appreciate that the old method of assuming a car to be fit to carry grain because the railroad agent has furnished it for loading is not sufficient for present conditions; and a thorough examination of cars before and after loading is vitally important. Recent statistics show that because of the increased carrying strain, the life of the modern freight car is much shorter than was that of cars of less capacity, therefore the age of a car, or its general appearance, should not be accepted as evidence of its fitness to perform the work you expect of it.

"If shippers will co-operate in these matters with receivers many serious losses will be prevented, and the disagreeable uncertainty as to where losses occur will be avoided. The Baltimore weighing department will be able to furnish absolutely correct information as to the contents and condition, also seal numbers of all cars of grain arriving there; but in the event of losses in transit, this will be of little practical value without similar information from shippers regarding the loading. You are requested to state this information on your invoices, also to call the consignee's attention to your record concerning the loading of cars. If ordinary care is observed in these matters when shipping, the benefits to be derived by co-operating with a modern and well-equipped weighing department will soon be appreciated. The fee for weighing will be fifty cents per car, regardless of capacity."

LUDICROUS MISTAKES.

Some ludicrous mistakes are made by some of the French-Canadian people in New England cotton mill towns in their attempt to master English. One summer a grain dealer in Somersworth, N. H., received a written order from one of his French customers, which read as follows:

"Please send
"1 bag whole corn
"1 mix field.
"5 pounds acid."

The clerk, who has had many years' experience with these people, said at once:

"Send him a bag of whole corn, a bag of mixed feed and five pounds of grass seed, or as the French people put it, 'hayseed.'"

And he was right. At another time an order was received for a bag of "corn broke," and at still another an order for a bag of "corn not broke."

THE CO-OPERATIVES

The Farmers' Elevator Co. at Doyon, N. D., is still in a tangle with its manager.

The Farmers' Elevator Co. at Litchville, N. D., made 50 per cent profits on last year's crop.

The Farmers' Elevator Co. of Enderlin, N. D., paid 8 per cent dividends on last year's business.

The Farmers' Elevator Co. of Rock Rapids, Iowa, wants to double its capital stock to enlarge its buildings.

The Cokato Elevator Co., co-operative, at Cokato, Minn., has leased its elevator to C. C. Erickson, of Minneapolis.

The Farmers' Grain Co. at Weston, Ill., is in the hands of two receivers, representing respectively the state and the federal courts.

The failure of the Farmers' Elevator Co. at Barnum, Iowa, was prevented by the stockholders, who doubled their capital stock, and also the buying margin.

CO-OPERATIVE BUSINESS CONGRESS.

Jas. Butler's Co-operative Business Congress of Farmers was held in Topeka, Kan., in October. There were quite a number of delegates present, who announced as their purpose:

To more closely unite the agricultural interests of the West and South. It is not our intention to organize a trust of the farmers. It has been said that we purpose to increase the price of wheat a stated amount. This we intend to do, but not by organizing and demanding that the consumers pay that for our produce. If we can sell our products to the Southern Association at a higher price than we receive from the middlemen, and can enable the southern producers to hold their produce, we will work out a plan whereby the price of farm products will naturally work higher.

Several days were spent in much discussion, and at length a weighty series of resolutions were formulated to show what these advocates of industrial co-operation think they are driving at. They say, among many other things:

The fundamental purpose of co-operation is to bring about more just relations between people in the same and different callings and to protect those who are now exploited through the existing industrial system against the extortion now imposed on them by great capitalistic aggregations.

The struggle to effect co-operative combination and displace capitalistic and competitive business methods has developed the difficulties to be overcome and also indicated the fundamental principles which must be observed in order to bring success. First and foremost, there must be the sincere desire for mutual benefits as distinguished from mere individual profits, and those who combine in a common enterprise must be educated to be just and mutually helpful. Second, there must be a clearly defined business scheme thoroughly thought out and outlined before any attempt is made to put it into execution. Third, there must be a combination of sufficient numbers having common interests to make it practicable. Fourth, adequate capital must be contributed to carry out the enterprise. Fifth and most difficult of all, the enterprise must be placed in the hands of men devoted to its success and having the requisite knowledge of the particular business to be carried on to compete under the conditions with which they are confronted with those conducting similar business under the old capitalistic methods. Sixth, there must be some effective means of intercommunication between the members of any co-operative organization so that they can be kept constantly informed as to what is being done and as to the purposes of those directing the enterprises.

The Congress thereupon recommended the educational work of the Farmers' Educational and Co-operative Union of America and the organization of a ladies' auxiliary thereto; also the passage of uniform laws relating to co-operative organizations; the investigation of the "grain trust," and "the development of a system of direct exchange of the different products of agriculture and the manufacturing of the raw products into finished products ready for the consumer as rapidly as practical methods accomplishing those results can be devised."

The United States Department of Agriculture has in press and will soon issue two Farmers' Bulletins, Nos. 268 and 269, relating to industrial alcohol, the former treating of its sources and manufacture and the latter of its uses and statistics. These bulletins have been prepared by Dr. H. W. Wiley, chief of the bureau of chemistry, and are designed to meet the popular de-

mand for information in regard to denatured alcohol, relating to which a law was passed by Congress on June 7, 1906. These bulletins define in a proper way what denatured alcohol is, the sources from which it is obtained, the processes and appliances used in its manufacture, the cost of manufacturing, the uses to which it may be applied, and the officials of the government charged with the enforcement of the law.

REMEDY FOR ERROR IN QUOTATION OF RATES.

Attorney-General Atkinson of the state of Washington has given an opinion to the effect that the Railroad Commission has not power to act in a hay rate complaint made by the Zerwekh Cheatham Grain Company of Seattle, reading, in part, as follows:

"Desiring to purchase some hay at Sunnyside, Wash., but not knowing the freight rate, we went to the Northern Pacific office to obtain the information and were told that the rate, in car lots, was 12½ cents per 100 pounds, or \$255 per ton from Sunnyside to Seattle, Wash. This rate was quoted us by Mr. Prescott, one of their agents.

"Having been quoted this rate, we bought the hay on the basis of this rate, and ordered it shipped to Seattle. The hay arrived in due time, the freight bills were presented and in drawing the attention of the railway company to the fact that a higher rate was being charged than had previously been quoted us, we were then informed, for the first time, that the former quotation was erroneous, and that we must pay the correct rate, 14¼ cents per 100 pounds, or \$2.85 per ton.

"In justification of their stand taken, the railway company is attempting to shield its action behind an alleged rule or decision of the interstate traffic, whatever that may mean, under which rule or decision they claim railway companies cannot be held liable for errors by their agents in misquoting rates. Now in all other lines of business the principal is liable for the acts of his authorized agents. Are railroad companies in this state immune from this rule?"

The Attorney-General rules that as the statute now stands the Railroad Commission would not have the power to make a railroad company liable for the misrepresentations or errors of its station agents in regard to the freight or passenger rates charged on its lines within the state, to the person injured thereby. "However," continues the opinion, "it is likely such person would have a private right of action against such company in the state courts either on the general principle of the liability of the principal for the authorized representations of its agents, or under the section of the Session Laws, 1905, providing that each railroad company shall keep at each station, depot or office, a copy of a complete schedule of all rates, rules, orders, classifications or regulations then in force by it between all points in this state."

CORN AND DENATURIZED ALCOHOL.

E. W. Wagner, in the second edition of his pamphlet on denaturized alcohol, among other things says:

"Distillers concede that the average annual yield from a bushel of corn in the large distilleries is five proof gallons, which is equal to 2½ gallons of absolute alcohol or 2.66 gallons testing 94 per cent. It is also conceded by the larger distillers that the by-products used for feeding cattle pay the cost of distillation. Therefore, the cost of producing grain alcohol can be exactly determined by the price paid for corn. Corn at 30 cents per bushel would produce 95 per cent alcohol at 11 cents. Corn at 35 cents per bushel would produce 94 per cent alcohol at 13 cents. Corn at 40 cents per bushel would produce 94 per cent alcohol at 15 cents.

"This new industry for the employment of corn, at first indifferently received and even once ridiculed, is now growing daily as an important factor in the value of corn for the coming year. And why should it not? It is evident now that if any at all is wanted for this purpose, it will easily call for double the quantity heretofore required by the whole distilling and glucose interests combined. This means the consumption of more than 150,000,000 bushels of corn. Bear in mind always that the corn used for this purpose must be drawn from that 20 per cent which has always heretofore covered the amount that moves off the farm. The same percentage of the crop will be required for farm purposes as in other years."

Farmers in the Red River Valley are talking of substituting beans for wheat, until the lands recover from the over-cropping to wheat.

SEEDS

A new seed house for the Cockley Milling Co. is under construction at Lexington, Ohio.

It is announced that the Archer-Daniels Linseed Oil Co. of Minneapolis, Minn., will erect a three-story addition at a cost of \$10,000.

The Ohio Experiment Station, with a view of determining the condition of the seed corn used in that state this year, is asking samples from all the growers.

L. P. Aitkin of Klondike, Minn., recently sold to Con O'Brien at Brainerd a wagonload of clover seed for \$149. It was raised on about five acres of land from which a big hay crop had been harvested earlier in the season.

Secretary Coburn of the Kansas Board of Agriculture, who has done more than anyone to increase the cultivation of alfalfa in this country, states that by actual count there are 210,000 seeds in one pound of alfalfa seed, and about three times that number of stalks in an acre is the highest ever counted.

H. A. Kellogg & Son, seed merchants at Kirksville, Mo., intend building a seed warehouse in the near future. It will hold from 10,000 to 20,000 bushels of seed, the plans not as yet being completed as the firm desire to hear from other contractors. It is intended to install new crushers and grinders.

At the annual meeting of the Thompson Seed Co. of Albert Lea, Minn., president O. C. Thompson presented his report and directors were elected as follows: O. C. Thompson; W. A. Morrin, M. M. Jones, C. L. Hill and Clarence Wedge. The latter fills the vacancy made by the resignation of A. W. Larson, who expects to locate in the West. He will, however, retain his interest in the company.

The Farmers National Congress at Rock Island, Ill., condemned the present system of congressional free seed distribution. This action is in line with that of the National Grange and of a large majority of the State and local Granges. From nearly every state in the Union protests against this system will be presented to Congress at its next session. The farmers, through their organizations, are making it understood that they are opposed to distributing common varieties of cheap garden seeds by the general government.

WITHHOLDING INSPECTION CERTIFICATES.

The Attorney-General of Washington has ruled that the only persons entitled to a certificate of grain inspection are the consignor, consignee and railway agent.

The chief inspector had written him that the department had had "many requests for certificates on cars of grain by parties who own the warehouses in the interior where such grain has been stored before shipping, but who, after the grain has been shipped, have no interest farther in the same. Now the consignee here of some of such grain claims that such parties have no right to a certificate on the grain and desire us to refuse to issue the same. I have taken the ground that we cannot so refuse, but must issue to anyone asking for the same. Which position is correct?"

The Attorney-General thereupon, having quoted the law, said: "Of course the inspector may lawfully give the information contained in such certificates to anyone to whom the books in his office in which such information is contained are open, although it would not be his duty so to do. The statutes say that such books shall be open 'to any party in interest.' It is difficult to see how a person out of whose control such grain has gone forever and who never had any property rights in the same could be considered a party in interest. I do not see how the meaning of 'party in interest,' as used in this section, could be extended so as to include any persons other than the persons having some right of property in such grain, the consignor, consignee and common carrier."

Iowa has won the pennon for the largest yield of corn and brings that honor west of the Mississippi River. Illinois, formerly the leading corn state, must take second place, though it has a corn acreage of 9,617,000, as compared with 600,000 less for Iowa. The total yield of Illinois is estimated at only 317,000,000 bushels, while Iowa carries away another superlative with 400,000,000 bushels, the largest crop ever credited to any state. Illinois, long acknowledged as the leader in yellow cereal production, yields up supremacy to the more fertile western sister.—Iowa Exchange.

FOREIGN NEWS

Spanish farmers are demanding a duty for protection of 36 cents per bushel, as a minimum.

Brazil is increasing her corn production, especially in Sao Paulo, where many of the coffee planters are turning to corn and rice as side or catch crops.

For the first time in its history, Argentina this year has a decrease in the acreage sown to wheat, the area being 13,585,000 acres, against 13,870,000 the previous year.

The New South Wales government is likely to buy a site in Sydney harbor, on which to build an elevator to handle grain in bulk. The proposition has met with some objection, however.

It is expected that the Mexican duty on corn will be suspended, owing to the scarcity of that cereal in different parts of the Republic. Beans also are a short crop.

In India, where the plague strikes all classes of people, it is a curious fact that dealers in grain are nearly always the first victims and that their mortality is particularly high. The probable cause is the number of rats about granaries. Wherever the rats are destroyed there is immunity or comparative immunity from the disease.

The new form of contract for Kurrachee (Indian) wheat provides (1) that all dirt, seeds, etc., up to 2½ per cent shall be paid for by the seller at contract price of the wheat, and at double that price beyond 2½ per cent; (2) that the wheat be assumed to contain 2 per cent barley and/or pulse, and/or other feeding stuffs, and to be free from dirt, oilseeds, and other extraneous matter. All barley, pulse and other feeding stuffs beyond the 2 per cent to be deemed one-half the value of the wheat.

ODESSA GRAIN MARKET.

An excerpt from a Russian paper furnished by Vice-Consul A. W. Smith, at Odessa, reviews the condition of the grain export trade at that port as follows:

"The second half of the grain campaign of 1905-6 proved as unsatisfactory as the first. From the information on hand for the first seven months of the current year it can be seen that there were exported abroad from Odessa about 37,000,000 poods (666,000 short tons) of grain, while last year, when the exports were considered to be very low, there were nevertheless exported during the same period 38,000,000 poods (684,000 short tons). The falling off in the grain exports of Odessa is largely attributable to the reduction in the quantities of grain brought down from the wharves on the Dnieper River, due to the competition of Kherson, 92 miles east of Odessa. The above-mentioned 37,000,000 poods exported in 1906 from Odessa comprise about 10,000,000 poods (180,000 short tons) of grain brought to Odessa from the Dnieper and the Dniester, while, as a rule, the arrivals at Odessa of grain by water usually formed more than 50 per cent of the total grain exports shipped from Odessa.

"The new grain campaign at Odessa begins under unfavorable conditions. The repeated strikes of the free-day laborers, and of those employed by the railroads as well, seriously hamper the exports. The port expenses have risen and Odessa finds a difficulty in competing upon the foreign markets. The competition, however, of Kherson appears less to be apprehended this year than last, as the quality of the grain to be shipped thence is not high, the grain being damp and of light weight and unsuited for loading without being mixed with dry grain of higher quality, such as is not now available in Kherson, so that much of this grain will have to be directed to Odessa, here to be mixed with grain received from Akkerman and by rail. The exports of grain from Kherson will also decline owing to the banks there refusing to offer guarantee for the quality and quantity of the grain shown in the bills of lading.

"The Odessa Bourse has received a circular note issued by the Bremen grain importers and directed to the Odessa exporters, wherein it is pointed out that the first parcels of south Russian barley of this year's crop have proved to be damp. The importers complain about the losses, since owing to the bad quality of the merchandise the persons to whom they had sold the barley do not accept it, and that at the same time they have no guarantee that all the south Russian exporters will pay the bonifications adjudged by the courts of arbitration. The importers give warning that if more of the barley already purchased by them proves damp they will not accept any further drafts of the exporters. To avoid all future misunderstandings the

importers propose to the exporters to obtain certificates regarding the good quality of the merchandise when laden. These certificates can be issued by the exchange committee, who will preliminarily have to inspect the grain shipped for abroad. From the information on hand at Odessa the complaints regarding the bad quality of the grain refer to barley laden at the port of Azov (on the Sea of Azov) and partly at Kherson. The shipments made from Odessa were satisfactory.

OPERATION OF THE GERMAN TARIFF.

The Berlin correspondent of the Millers' Gazette of London, of recent date, calls attention to one effect of the new German tariff laws, as follows:

After our import duties on grain had been raised to their present height, the German corn trade, with the whole distribution of our inland crops, has taken quite a different turn compared with previous years. This change, however, has seriously affected the interests of the German grain trade. Owing to the high duty being refunded on the export of homegrown grain, the inland trade has been turned upside down. In many districts the German merchant is only enabled to buy the growth of his native country in competition with offers coming in from abroad, and the striking point is, every foreigner can get our homegrown grain free to our frontier 50m. to 55m. (\$11.90 to \$13.09) or 40m. to 45m. (\$9.52 to \$10.71) per 1,000 (2,200 pounds) kil cheaper than when delivered to the port in his own country. If, for instance, Danish, Scandinavian or Russian importers offer 105m. (\$24.99) ex-coast for rye grown in Pomerania, Posen or Mecklenburg, a poor German subject will have to pay about 155m. (\$36.89) for the very same grain. Otherwise it will take its way to foreign countries instead of remaining in Germany, where it is urgently wanted for consumptive purposes.

Speaking ironically, to what a high preference to foreigners are we Germans exposed! We actually have to pay 55m. (\$13.09) per ton more for our own requirements of wheat than our buyers abroad. The import duty formerly refunded at the export of the grain without identifying the origin of it was certainly a blessing, enabling our eastern provinces to sell abroad their inland growth, which was not always fit for their home trade. Even the present system of the import certificates first permitting the export against the import of an equal quantity free of duty, proved to be a rather harmless arrangement as long as at a more moderate duty than that of to-day, the capability of the competition of German grain in the world's markets was limited to a certain proportion. However, since wheat 55m. (\$13.09) rye and oats 50m. (\$11.11) under our price in the interior can be sold to foreign countries, the competition of German grain in foreign markets has increased so far it is no longer a matter of a profitable sale of a local surplus, but a regular export of corn being urgently wanted for the consumptive requirements of our own population.

THE BALTIC.

The Baltic is a grain exchange in London where cargoes of wheat and corn are sold from all parts of the world, and where arbitrations are going on all the time on account of contracts not being lived up to. Operators on that exchange make no bones about taking advantage of traders whenever the opportunity rises, and the experts on that exchange do not hesitate to tell the truth, although they are by no means the best judges of the grain they sit upon in judgment. To test their efficiency, members have been known to take two samples from the same bag, one in each hand, and have gone to one of these so-called experts and asked to give his judgment on the two samples, and he has awarded one handful 6d. more than the other, although they belonged to one and the same parcel. —Exchange.

The Rosenbaum Grain Co. presented a tornado insurance claim for damages to a frame dust spout leading from the main elevator to a smaller building at Kingfisher, Okla. The insurance companies paid the claim after a controversy, taking the ground an insurance policy does not contemplate damage to the frail piping leading away from the building. They have cancelled their tornado liability for this company.

The state of Washington penitentiary Commission is said to have found evidence that speculation in grain bags made by the prisoners has occurred at several points in eastern Washington and the Commission will try to fix the responsibility. The form of application prescribed by the board was not used, but the old form, in which the applicant was not required to make an affidavit that the sacks were for his own use on lands owned or received by him.

LATE PATENTS

Issued on October 9, 1906.

Corn Sheller.—James L. Glenn Jr., Clarksville, Tenn. Filed September 20, 1905. No. 832,854. See cut.

Conveyor.—Christopher W. Levalley, Milwaukee, Wis. Filed February 20, 1906. No. 832,986.

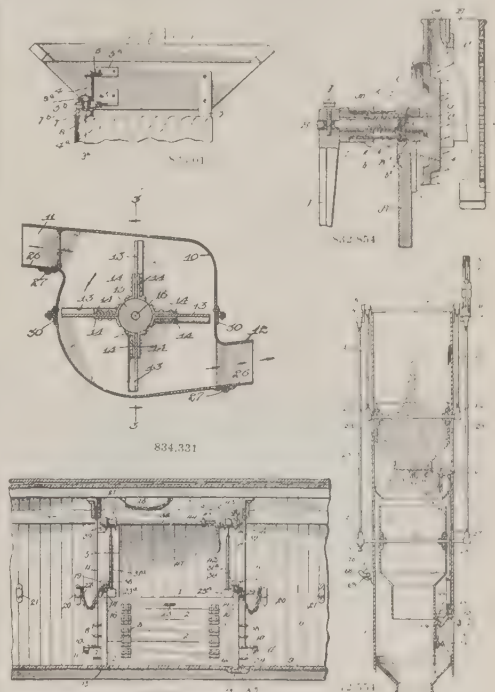
Bag Holder.—Josiah M. Welbourn, Edison, Ohio, assignor of one-half to Ernest R. Powell, Edison, Ohio. Filed September 25, 1905. No. 833,013. See cut.

Issued on October 16, 1906.

Conveyor.—John H. Gilman, Ottawa, Ill., assignor to King & Hamilton Co., Ottawa, Ill. Filed September 9, 1905. No. 833,319.

Bucket Elevator.—John Ross, San Francisco, Cal. Filed February 28, 1906. No. 833,417.

Conveyor.—William L. Morrow, Stockton, Cal. Filed May 24, 1906. No. 833,447.



Grain Door for Cars.—Tilghman E. Branson, Belle Plaine, Kan., assignor of one-third to W. S. Foster, Belle Plaine, Kan. Filed March 23, 1905. No. 833,503. See cut.

Issued on October 30, 1906.

Grain Distributing Device.—Thomas J. Skillin, Oak Park, Ill., assignor to Skillin & Richards Mfg. Co., Chicago, Ill. Filed March 22, 1906. No. 834,331. See cut.

Issued on November 6, 1906.

Automatic Weighing Machine.—Henry C. Bowlus, Springfield, Ohio, assignor to the Bowlus Automatic Scale Co., Springfield, Ohio. Reissue. Filed July 23, 1906. No. 12,554. Original No. 712,757, dated November 2, 1902. See cut.

The press here and in the West has had some things to say about the "call." Of course, it "doesn't suit" those who never asked for company when making prices in the past. Most of the interior dealers who have seen its practical workings are satisfied that it has created a much-desired competitive market on corn and oats to arrive. Never mind the "chatter" of the elevator philanthropist who "doesn't know" (?) about his own business—and never attended the "call." There are other critics, who may be trying in that way to forget "their own troubles."—Pope & Eckhardt Co., Chicago.

Private elevators at Duluth make up about 80 per cent of the total elevator capacity at the Head of the Lakes. In fact, there are only two regular houses, the Consolidated Elevator Co. and the Capitol, with a combined capacity of 2,750,000 bushels. Partly, this condition of affairs is due to the loss of the Peavey Elevator last winter that took 4½ million out of the list of regular, and partly to the difficulty over the Wisconsin inspection law, which prohibits elevators from issuing warehouse receipts. The law has been declared invalid by

the United States federal court and is now before the Court of Appeals. It is safe to say that by spring there will be a material increase in 'regular' houses. The 'private' houses have been given a gentle reminder this fall that will last for some time to come.—Commercial Record.

For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

FEED BAGS.

Sewing twine, etc., for sale. Bottom prices.
WILLIAM ROSS & CO., 57 S. Water St., Chicago.

ELEVATORS AND MILLS

FOR SALE. RENT OR EXCHANGE.

Good mill and elevator located in fine wheat country. Favorable terms. Address
F. S. R., Box 1, care "American Elevator and Grain Trade," Chicago, Ill.

A BARGAIN.

For sale, 25,000-bushel elevator, with coal business; in Indiana. Ship 175 cars corn and oats per year; \$7,500 cash if taken at once. Address
LOCK BOX 47, Fortville, Ind.

FOR SALE.

One-hundred-thousand-bushel elevator, doing an annual business of 500,000 bushels, located in best grain district of western Indiana, on the Chicago & Eastern Illinois Railroad, about 100 miles from Chicago. The plant has first-class equipment and is in perfect order. Write for full description and particulars to

BOX 3, Freeland Park, Ind.

ELEVATORS FOR SALE.

We have a large list of extra good bargains in elevators, first-class locations, doing good business. Write for prices and descriptions, giving location you prefer. We furnish managers and buyers for elevators and secure positions for men who wish to change their location. If interested in an elevator or milling proposition be sure and write to us.

IOWA MILL AND ELEVATOR BROKERS, Independence, Iowa.

FOR SALE.

The best combined receiving, shipping, commission, wholesale and retail hay, grain and feed business in the country. Latest and best equipped warehouse; storage for 800 tons of hay and 8,000 bushels of grain; power shovel for unloading to elevator; self-cleaning bins; new corn-chop mill and sack-feed storage; private switch; three street fronts; all in the heart of the best and most progressive city in the United States. Ill health is cause of selling and an up-to-date, all-around feed man can make a fortune here. Can make terms. Write for particulars to

WOOLSEY-STAHN HAY CO., Kansas City, Kan.

MACHINERY

FOR SALE.

One No. 37 Howes Oat Clipper, good as new. Address
THE ADY & CROWE MERCANTILE CO., Denver, Colo.

FOR SALE.

One No. 4 Iron Prince Scourer, good as new; capacity, 150 to 200 bushels per hour. Dirt cheap; write for price.

A. S. GARMAN & CO., Akron, Ohio.

FOR SALE.

One 60-horsepower slide-valve engine, with automatic cut-off governor. This machine is in fine condition. For price and particulars write to
FROEDTERT BROS. GRAIN AND MALTING CO., Milwaukee, Wis.

FOR SALE.

Gasoline engines; one 54-horse Fairbanks-Morse; one 28, one 16, one 12, 2, 8 and 25 horsepower Sterling Charter. All sizes and prices in small sizes.

A. H. McDONALD, 38 W. Randolph St., Chicago.

FOR SALE.

One No. 2 Barnard's Improved Double Screen Corn Cleaner, 500 to 700 bushels' capacity. Thoroughly refitted, practically as good as new. Low price.

W. H. CALDWELL, 303 and 304 Western Union Bldg., Chicago, Ill.

FOR SALE.

Thirty-horsepower actual, four-cycle, slow-speed Davis Gasoline Engine. Cost, \$1,100. In excellent condition; run only five months. Perfect regulation; heavy fly-wheel for electric light load; \$700 f. o. b. cars Roca, Neb. Replacing with Corliss engine, reason we want to sell. Address

U. G. POWELL CO., Box 567, Lincoln, Neb.

FOR SALE.

One Houston Stanwood-Gamble engine, 14x20, 60 horsepower.

One boiler, 120 horsepower, 74-4-inch flues.

One pump, 6x8.

One boiler feed heater.

One smokestack.

One fire front, grate bars.

Pipe connections.

CARRINGTON, PATTEN & CO., 403 Board of Trade, Kansas City, Mo.

FOR SALE CHEAP.

One Barnard & Leas Receiving Separator, capacity 200 bushels per hour.

One No. 5 Eureka Separator.

One No. 5 Eureka Oat Clipper.

One Marseilles New Process Dustless Warehouse Corn Sheller and Cleaner, capacity 500 bushels per hour.

Two Boss Car Loaders.

All in good condition. Worn but little.

CRABBS-REYNOLDS-TAYLOR CO., Crawfordsville, Ind.

FOR SALE.

One No. 4 two-fan Monitor Dustless Receiving Separator, capacity 300 to 600 bushels.

One No. 0 two-fan Monitor Dustless Receiving Separator, capacity 1,500 bushels.

One No. 7 Invincible Milling Separator, capacity 250 bushels per hour.

Five No. 7 Eureka Warehouse Scourers, capacity 350 bushels.

One No. 9 two-fan dustless Monitor Receiving Separator, capacity 3,000 bushels.

All in fine condition.

STRAUB MACHINERY CO., Cincinnati, Ohio.

SCALES

SCALES FOR SALE.

Scales for elevators, mills, or for hay, grain or stock; new or second-hand at lowest prices. Lists free.

CHICAGO SCALE CO., 299 Jackson Boulevard, Chicago, Ill.

"THE STANDARD" SCALES.

For all purposes. Portable, Wagon, Hopper and Track Scales. Guaranteed durable and accurate; quality higher than price. Not in the trust.

THE STANDARD SCALE & SUPPLY CO., Station U., Chicago, Ill.

Miscellaneous Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

TO EXCHANGE.

Illinois corn and wheat farm to trade for good paying grain elevators. Address

J. M. MAGUIRE, Campus, Ill.

INSTANTANEOUS GRAIN CALCULATING TABLES.

Quick method for reducing corn, wheat, oats, rye and barley from pounds to bushels. Shows at sight from 1,000 to 100,000 pounds. An indispensable book for the grain dealer. Published by
STROMBERG, ALLEN & CO., 302 Clark Street, Chicago, Ill.

ELEVATORS WANTED

WANTED.

Elevator or mill and elevator for good improved Illinois or Iowa farm. Address

IOWA, Box 1, care "American Elevator and Grain Trade," Chicago, Ill.

GRAIN AND SEEDS

SEEDS WANTED.

Clover, timothy and red top. Car lots or less. Submit samples and prices.

LOUISVILLE SEED CO., 208-210 Second St., Louisville, Ky.

MIXED CARS A SPECIALTY.

Flour, feed, rye, oats and corn. Send along your orders.

GOSHEN MILLING CO., Goshen, Ind.

WANTED.

Oats, corn, feeds and hay of all kinds. Send samples and quotations. Address

SOUTH SHORE GRAIN CO., Quincy, Mass.

CORRESPONDENCE INVITED.

We are now ready to handle corn, wheat and Kaffir corn and invite your correspondence when in need of any grain.

J. C. HAINES & CO., Augusta, Kan.

SEEDS. We buy and sell CLOVER, TIMOTHY, RED TOP, MILLETS, POP CORN, KAFFIR CORN, CHICKEN FEED GRAIN, Etc. WRITE US. DO IT NOW. Sample envelopes for the asking.
THE ILLINOIS SEED CO., CHICAGO.

ROOFING AND SIDING.

SYKES STEEL ROOFING CO.

611 So. Morgan Street, Chicago

MAKERS OF FIREPROOF WINDOWS

WE manufacture all gauges of corrugated iron, either painted or galvanized. We make Patent Cap Roofing, Roll Cap Roofing, "V" Crimped Roofing, Metal Ceilings, etc., etc.

We make a specialty of

Corrugated Iron and Metal Roofing For Grain Elevators

And take contracts either for material alone or job completed. Write us for prices. We can save you money.

Brainerd-Prather Grain Co.

WILLIAMSVILLE, ILL.

Elevators at Williamsville and Vanwood

Buyers at the following C & A. points: Williams-
ville, Vanwood, Sherman and Ellis.**DECORAH, IOWA****CLOVER**We want your Medium, Mammoth and Alsike Clover;
also Buckwheat and other field seeds

Send Samples, State Amount and Price

We will wire acceptance

ADAMS SEED CO., SUCCESSIONS TO
N. H. Adams & Son
Decorah, Iowa**GRAIN RECEIVERS****BATTLE CREEK****McLane, Swift & Co.,**Buyers
of**GRAIN**Battle Creek,
Mich.

CORRESPONDENCE FROM EASTERN BUYERS SOLICITED.

BOSTON**Wheat**
A
Specialty**A. P. Aldrich
& Sons**

Incorporated. Capital, \$150,000

Hay, Grain, Flour201 Chamber of Commerce
Established 1882 BOSTON, MASS.**DECATUR**

OUR BIDS ARE GOOD ONES.

BALTIMORELOUIS MÜLLER, Pres't. JOHN M. DENNIS, Vice-Pres't,
FERDINAND A. MEYER, Treas.**LOUIS MÜLLER CO.**
Grain Receivers and Exporters
BALTIMORE, MD.Members of the Baltimore Chamber of Commerce, Chicago
Board of Trade, St. Louis Merchants' Exchange, Grain
Dealers' National Association, Indiana Grain
Dealers' Association.**CEDAR RAPIDS**

J. H. FAULKNER

FRED FAULKNER

J. H. FAULKNER & CO.

GRAIN BROKERS

CEDAR RAPIDS, - - - IOWA

GRAIN RECEIVERS**PITTSBURG****H
A
Y****Clover Hay Wanted**Our superior facilities and connections
with large buyers of HAY and GRAIN
enable us to get the best prices. Liberal
advances made on shipments.**Daniel McCaffrey's Sons Co.**
Pittsburg, Pa.Reference: Duquesne National Bank.
Washington National Bank.
In the one spot 40 years.**G
R
A
I
N****N. MORTON**

RECEIVER AND SHIPPER

GRAIN, HAY AND FEED
Consignments SolicitedMember: National Hay Association; Pittsburg Grain and
Flour Exchange.207 Grain Exchange Bldg., Pittsburg, Pa.
Reference, Monongahela National Bank**W. C. DOUGLAS**

FEED AND GRAIN BROKER

Empire Building - Pittsburg, Pa.

Exclusive control of a good account desired for Western
Pennsylvania

Reference: The Diamond National Bank

CLEVELAND**THE UNION ELEVATOR CO.**

BUYERS AND SHIPPERS

WHEAT, CORN, OATS, HAY AND STRAWOUR SPECIALTY: RECLEANED ILLINOIS SHELLD CORN
CLEVELAND, O.**MINNEAPOLIS****F. H. PEAVEY & CO.**

MINNEAPOLIS,

GRAIN RECEIVERS MINN.

Consignments Solicited.

MILLING WHEAT A SPECIALTY

Marfield, Tearse & Noyes
Inc.

GRAIN COMMISSION

CONSIGNMENTS AND ORDERS FOR FUTURES
SOLICITED.Offices: Chicago, Milwaukee, Minneapolis, Duluth.
Private wires: Chicago and New York.

511-514 New Chamber of Commerce, Minneapolis, Minn.

INDIANAPOLIS

The

Bassett Grain Co.

INDIANAPOLIS

Telephones 80 Rooms 33 and 35 Board of Trade

W. J. RILEY

W. E. JARBOE

W. J. Riley & Co.

22 Board of Trade, Indianapolis, Indiana

Grain, Flour and FeedTrack bids made on application
We want your tradeLet us have your consignments
It will pay you to deal with us

NEW OR OLD PHONE 3434

MILWAUKEEB. G. ELLSWORTH, President H. H. PETERSON, Vice-President
E. H. HIEMKE, Secretary**L. Bartlett & Son Co.****GRAIN**
COMMISSION MERCHANTSRoom 23 Chamber of Commerce Building
MILWAUKEE, WIS.

O. MOHR, Mgr.

G. C. HOLSTEIN, Sec'y-Treas.

Mohr-Holstein Commission Co.

29 Chamber of Commerce

MILWAUKEE

Sample Grain a Specialty

BRANCH OFFICES AT CHICAGO, MINNEAPOLIS

ESTABLISHED 1864

I. H. Lowry & Co.

64 Mitchell Building, MILWAUKEE, WIS.

GRAIN COMMISSION MERCHANTS

Branch Offices at CHICAGO, MINNEAPOLIS

We solicit your consignments

CHICAGO

MINNEAPOLIS

J. V. LAUER & CO.

Grain Commission

BARLEY A SPECIALTY

Ship us your next car

Chamber of Commerce MILWAUKEE, WIS.

DETROIT

A. S. DUMONT

R. C. ROBERTS

A. E. O'DONNELI

Dumont, Roberts & Co.**RECEIVERS GRAIN SHIPPERS**

Chamber of Commerce

Merchants Exchange

DETROIT, MICH.

DECATUR, ILL.

Consignments Solicited.

Ask for our Bids and Quotations.

CAUGHEY & CARRAN

DETROIT, MICH.

Grain and Seed Merchants and Commission

OUR SPECIALTY: OATS AND CLOVER SEED

We handle Beans, Barley, Rye, Corn, Wheat. Try us. Liberal
advances

OFFICES: 620 to 624 Chamber of Commerce

ELEVATOR and SEED HOUSE: Corner 14th and Baker Sts.

HOUSTON

Correspondence Solicited

Robinson Cypher Code

FRANK THOMS & CO.

(INCORPORATED)

COMMISSION MERCHANTS

Grain, Mill Feed and Hay

HOUSTON, TEXAS

GRAIN RECEIVERS

CHICAGO

E. GERSTENBERG

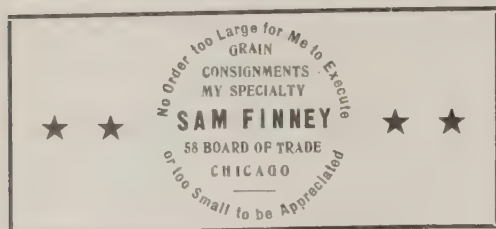
A. GERSTENBERG

Gerstenberg & Co.

Commission Merchants

HANDLE ALL GRAINS AND SEEDS

Barley a Specialty

OUR SERVICE WILL PLEASE YOU
CHICAGOST. LOUIS
CHICAGOVAN NESS BROTHERS
Grain CommissionMILWAUKEE
PEORIA

W. H. MERRITT & CO.

Grain Buyers and Shippers

CORRESPONDENCE SOLICITED

87 Board of Trade, CHICAGO, ILL.

CHICAGO

GEO. S. DOLE, Pres.

H. N. SAGER, Sec.

J. H. DOLE & CO.
(Established 1852)

Commission Merchants, Grain and Seeds

We solicit your

CONSIGNMENTS

and orders in futures

226 La Salle Street,

CHICAGO

PHILIP H. SCHIFFLIN, Pres.

EUGENE SCHIFFLIN, Secy.-Treas.

H. HEMMELGARN, Vice-Pres.

PHILIP H. SCHIFFLIN & CO., Inc.

Successors to

H. HEMMELGARN & CO.

Commission Merchants

515-518 Postal Telegraph Bldg.
CHICAGO, ILLINOISConsignments of all kinds of Grain and Field
Seeds a specialty

Good Prices

Prompt Returns

Very Best Attention

and **W. A. FRASER CO.**
"They're Running Mates"

MINNEAPOLIS CHICAGO MILWAUKEE

F. E. WINANS

Grain and Field Seeds Commission Merchant

BARLEY, OATS, WHEAT, CORN, RYE
TIMOTHY, CLOVER, FLAX, HUNGARIAN MILLET

6 SHERMAN STREET, CHICAGO

Write us freely on all matters pertaining to grain and field seeds.
Your questions fully and cheerfully answered; particular attention paid to timothy seed and grain by sample. Consignments and speculative orders receive our careful personal attention.

J. ROSENBAUM GRAIN CO.
(INCORPORATED)
GRAIN MERCHANTS
CHICAGO

RUMSEY & COMPANY

COMMISSION MERCHANTS

GRAIN, HAY, SEEDS AND PROVISIONS

CASH AND FUTURE DELIVERIES

97 BOARD OF TRADE, CHICAGO

Receiving a Specialty

Every Department Fully Manned by Men of Ability and Long Experience

CHICAGO

Geo. A. Wegener

with

GEO. H. SIDWELL & CO.
(Established 1869)Commission Merchants
Grain, Seeds, Hay and Provisions

742 743 Postal Telegraph Bldg.,

Chicago

YOUNG & NICHOLS

Established 1883

Grain Commission Merchants

SOLICIT YOUR CONSIGNMENTS AND ORDERS
FOR FUTURES

169 Jackson Blvd., CHICAGO, ILL.

You do good business when you ship to

M. E. COOKE

Grain and Hay Commission Merchant

85-86 Board of Trade, CHICAGO

Write for my track bids.

Tax Free

DENATURED ALCOHOL

Its Bearing Upon Corn Prices

Its Benefit to the Agricultural Industry

A pamphlet sent upon receipt of 10 cents in stamps

E. W. Wagner

99 Board of Trade

Chicago

J. H. WARE E. F. LELAND
O. W. LEE F. J. FAHRYConsign your grain and seeds and send your
Board of Trade Orders to**WARE & LELAND,**

400-410 Postal Telegraph Bldg., Chicago.

GRAIN, PROVISIONS,
STOCKS AND COTTON.

Write for our Daily Market Letter.

Your interests are our interests.

Special attention given to cash
grain shipments.

GRAIN RECEIVERS

CHICAGO

A. L. SOMERS, Pres. CHAS. A. JONES, Sec'y and Treas.

SOMERS, JONES & CO.

(Incorporated)

COMMISSION MERCHANTS

82 Board of Trade Bldg., CHICAGO

GRAIN AND FIELD SEEDS

CONSIGNMENTS AND ORDERS FOR FUTURE DELIVERY SOLICITED. :: LIBERAL ADVANCES ON CONSIGNMENTS

LUCIUS & DYCKMAN

Grain Commission

725 Postal Telegraph Building

CHICAGO

William H. Lake Jno. A. Rodgers Edw. P. McKenna

W. H. LAKE & CO.

Commission Merchants

Grain, Provisions, Stocks

50 Board of Trade - - CHICAGO

MEMBERS: Chicago Board of Trade; Chicago Stock Exchange; New York Produce Exchange; St. Louis Merchants' Exchange; Milwaukee Chamber of Commerce.

ESTABLISHED 1852

T. D. RANDALL & CO.

COMMISSION MERCHANTS

HAY, GRAIN AND FLOUR

92 Board of Trade Bldg., CHICAGO

J. C. Shaffer & Co.

Buyers and Shippers

of Grain

240 La Salle St. Chicago

E. W. BAILEY & CO.

Commission Merchants

GRAIN, SEEDS AND PROVISIONS

72 Board of Trade, CHICAGO

ARMOUR GRAIN CO.

GRAIN DEALERS

Consignments solicited. This department is fully equipped in every way to give the very best service in Chicago.

205 La Salle St. CHICAGO

FREEMAN BROS. & CO.

Successors to H. H. FREEMAN & CO.

HAY, STRAW AND GRAIN

COMMISSION MERCHANTS

Correspondence and Consignments 66 BOARD OF TRADE Solicited. . . Market Reports on Application. CHICAGO, ILL.

CHICAGO



COMMISSION MERCHANTS

We Have

every facility for handling grain on consignment or for future delivery.

Experienced Men on 'Change
Ample Financial Resources
Thirty Years' Experience

77 Board of Trade

H. M. PAYNTER

GRAIN COMMISSION

Special attention given consignments of grain and seeds.

Orders in futures carefully executed.

5 and 7 Board of Trade, Chicago.

All business transacted through and confirmed by Milmine, Bodman & Co.

H. W. ROGERS, Pres. J. C. ROGERS, Vice-Pres.
C. J. HURLBUT, Secy. and Treas.

ROGERS GRAIN COMPANY

(Incorporated)

Buyers, Shippers and Exporters of

GRAIN

Elevator proprietors on Illinois Central and other Railroad Systems.

Main Office: 700-701 Royal Insurance Bldg., Chicago

WRIGHT, BOGERT & CO.

COMMISSION MERCHANTS

Correspondence and Consignments Solicited
Orders for future delivery carefully executed

Screenings and Mill Feed

306-308 Postal Telegraph Building

CHICAGO

WARNER & WILBUR,

GENERAL COMMISSION

MERCHANTS

CONSIGNMENTS AND ORDERS IN FUTURES SOLICITED

417 and 419 Royal Insurance Building

Established 1879

CHICAGO, ILL.

HULBURD, WARREN & CHANDLER

Stock Brokers and Commission

Merchants, Grain and Provisions

Business Solicited in any Department. Receiving,
Shipping, Futures.

212-214 La Salle St., CHICAGO

WHITE & RUMSEY GRAIN CO.

SHIPPERS

Owners and operators Prairie State Transfer
Elevator at Kankakee, Ill.

97 Board of Trade, CHICAGO

POPE AND

WILLIAM J. POPE, Pres.
W. N. ECKHARDT, Secy.

ECKHARDT CO.,

COMMISSION MERCHANTS

GRAIN SEEDS PROVISIONS

317-321 Western Union Building,
CHICAGO.

CHICAGO

Long Distance Telephone Harrison 632

C. H. Thayer & Co.

Successors to W. R. HUMFORD CO.

Founded 1870

COMMISSION MERCHANTS
Grain, Seeds, Futures

Your Consignments and Future Orders Solicited

Our untarnished record for the past 35 years, with a capital of \$100,000, speaks for itself

Rooms 51, 55, 56, 57, 58, 59

2 AND 4 SHERMAN STREET

CHICAGO

ST. LOUIS

CONNOR BROS. & Co.

GRAIN

ST. LOUIS, MO.

Daniel P. Byrne & Co.

General Commission Merchants

SUCCESSORS TO

Redmond Cleary Com. Co.

Established 1854

Incorporated 1887

Grain, Hay, Mill Feed and Seeds

Chamber of Commerce, St. Louis, Mo.

Pendleton Grain Co.

RECEIVERS SHIPPERS

Cash Grain and Futures

MERCHANTS EXCHANGE

ST. LOUIS

NEW YORK CITY

BROOKLYN HAY & GRAIN CO.

HAY, STRAW AND GRAIN

COMMISSION MERCHANTS

ON ALL MARKETS IN NEW YORK HARBOR

Office: Borough of Brooklyn, New York

DUSENBERY & CO.

COMMISSION

HAY

Liberal Advances

Prompt Returns

136 Liberty St.

New York City

GRAIN RECEIVERS

TOLEDO

C. A. KING & CO.

The Golden Rule grain and seed firm of Toledo. Try them on futures, grain, seeds and provisions, Toledo and Chicago. They give GOOD SERVICE. Send them your Toledo consignments of seeds and grain if you want TOP PRICES. Accept their bids. Since 1846 they have passed through panics, wars, floods and fires. Ask for their SPECIAL reports. Read Boy Solomon's sermons. Be friendly Write occasionally

Frederick W. Rundell James E. Rundell
ESTABLISHED 1877
W. A. RUNDALL & CO.
Grain and Seeds
CASH AND FUTURES
Consignments Solicited Ask for our Daily Grain Bids
Room No. 33 Produce Exchange, TOLEDO, O.

The J. J. Coon Grain Co.

GRAIN, SEEDS AND FEED

61 Produce Exchange

TOLEDO, OHIO

CONSIGNMENTS SOLICITED CASH AND FUTURES

REYNOLDS BROS.

TOLEDO, O.

Buy and Sell Grain

SELL US YOURS

If you don't get our bids, ask for them. Consignments always welcome. Consign us yours.

J. F. ZAHM F. W. JAEGER F. MAYER
ESTABLISHED 1879
J. F. ZAHM & CO.
GRAIN and SEEDS
TOLEDO, OHIO
Handling consignments and filling orders for futures
OUR SPECIALTY
SEND FOR OUR DAILY CIRCULAR; IT'S FREE

CAIRO

H. L. Halliday Milling Co.

RECEIVERS AND SHIPPERS

CORN-WHEAT-OATS

CAIRO,

ILLINOIS

PEORIA

ESTABLISHED 1875

P. B. & C. C. MILES
Grain Commission Merchants
BUYERS AND SHIPPERS

36-37 Chamber of Commerce, PEORIA, ILL.

A. G. TYNG, Jr. D. D. HALL

TYNG, HALL & CO.
Grain and Commission Merchants

ROOMS 33 AND 35 CHAMBER OF COMMERCE
PEORIA, ILLINOIS

Van Tassell Grain Company

GRAIN COMMISSION MERCHANTS

BUYERS and SHIPPERS

43 AND 45 CHAMBER OF COMMERCE
PEORIA, ILLINOIS

MILLS BROS.

Peoria, Illinois

Grain Commission Merchants

LANCASTER

DO YOU REALIZE

That country trade always pays you best in every way?

We work a large country business. See the point?

JONAS F. EBY & SON, LANCASTER, PA.

KANSAS CITY

We get top prices and make Prompt Returns

ERNST-DAVIS GRAIN CO.

Kansas City, Mo.

Fill orders for futures promptly, too, in Chicago, Kansas City or St. Louis markets. We solicit your business.

CINCINNATI

THE GALE BROS. CO.

CINCINNATI, O.

Have all facilities and every equipment for handling your business

RIGHT

GRAIN

HAY

BUFFALO

W. W. ALDER

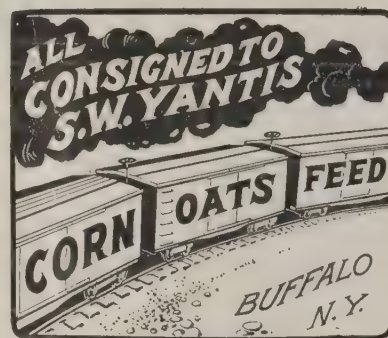
T. J. STOFER

Alder & Stofer

COMMISSION MERCHANTS

We do not buy any grain, but handle on commission, and solicit your Buffalo consignments.

83 Chamber of Commerce,
BUFFALO - - NEW YORK



DUDLEY M. IRWIN

BARLEY

69-70-71 Chamber of Commerce

BUFFALO, N. Y.

HENRY D. WATERS

Commission Grain Merchant

CONSIGNMENTS SOLICITED

54 Chamber of Commerce, BUFFALO, N.Y.

PHILADELPHIA

L. F. MILLER & SONS,

RECEIVERS AND SHIPPERS OF

Grain, Feed, Seeds, Hay, Etc.

OFFICE: 2931 N. BROAD ST., PHILADELPHIA, PA.

CONSIGNMENTS SOLICITED. Special attention given to the handling of CORN AND OATS.

REFERENCES: Manufacturers' National Bank, Philadelphia, Pa. Union National Bank, Westminster, Md.

FREMONT

Nye, Schneider, Fowler Co.

GRAIN DEALERS

Corn for Feeders. Milling wheat a specialty, both winter and spring. Write for samples and prices. Shipment via C. & N. W. R. R.

General Offices - - - FREMONT, NEB.

Your Money's Worth

is what you want when you buy insurance.

For elevator insurance you should not pay for poor hazardous or lower rated property or for big losses by conflagrations. The



makes the cost for elevators only. It is stronger than the average insurance company and not subject to conflagration losses. Write

C. A. McCOTTER, Sec'y
INDIANAPOLIS, IND.

**MILL OWNERS'
MUTUAL FIRE INSURANCE
COMPANY**

DES MOINES, IOWA

Insures Flour Mills, Elevators and Warehouses at actual cost. Net Cash Assets, \$218,020.94. Losses Paid, \$1,179,097.88.

Saved to Policy Holders,
\$1,622,157.48

ORGANIZED 1875

J. G. SHARP, Secretary

**Millers' National
Insurance Company**

205 La Salle St.

CHICAGO, - - ILL.

CHARTERED 1865

Insurance with a maximum of security at a minimum of cost for ELEVATORS, WAREHOUSES and CONTENTS, on the Mutual Plan. Five-Year Policies (or short term policies on grain, if required).

Semi-Annual Assessments, costing about one-half Stock Company rates.

No conflagration hazard.

Gross Assets, - - \$4,341,881.00
Net Cash Surplus - 759,569.00

**Millers' Mutual Fire Insurance
Association of Illinois**

ALTON, ILL

Good, but cheap, insurance on Elevators, Mills, Grain Warehouses and their Contents.

We make a specialty of writing Grain that you carry for a short term.

Premium Notes in Force, \$1,200,000.00
Cash Surplus, . . . 225,000.00

A. R. McKINNEY, Secretary.

H. D. CUMMINGS & CO.,
159 La Salle Street, Chicago Agents.

\$2.50 American Miller
AND
American Elevator
and Grain Trade
FOR ONE YEAR

Insurance on Elevators and Grain!

25 Years of Successful Business

We Have--Paid Losses \$1,500,000.00. Total Assets \$1,800,000.00. Net Cash Surplus \$328,000.00.

Michigan Millers Mutual Fire Insurance Co.

OF LANSING, MICHIGAN.

**THE
Large Profits
IN
Elevator Insurance**

heretofore paid by owners and operators of grain elevators to the stock companies are turned into the grain men's pockets by the

ELEVATOR UNDERWRITERS

For sound insurance at cost, address

U. S. EPPERSON

Attorney and Manager

409 Kemper Bldg. Kansas City, Mo.

**The Illinois Central's
"Cuban Special"**

TO NEW ORLEANS

From Chicago, St. Louis makes direct connection with new and finest of Steamship Service to HAVANA. Through tickets to Havana admit of stopover at New Orleans

**Superior Service, Both
Rail and Water**

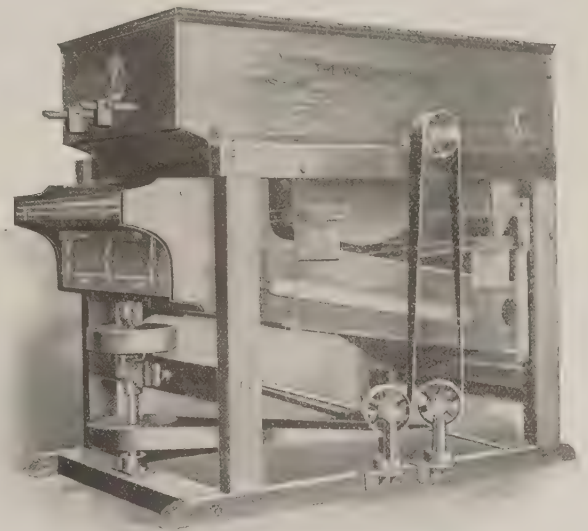
For particulars, trains, etc., address

W. H. Brill, District Passenger Agt.

99 Adams Street, CHICAGO

Depot, 12th Street and Park Row

**The IMPERIAL
GYRATORY
RECEIVING
SEPARATOR**



Does not have eccentrics to impart motion to the shoe, making it necessary to brace the machine, and sometimes the building. The Gyratory motion does the work, and it is not even necessary to brace the machine.

No machine can do BETTER work, or run MORE SMOOTHLY.

The Wolf Company

CHAMBERSBURG, PENNSYLVANIA, U. S. A.

SEEDS

THE ALBERT DICKINSON CO.

DEALERS IN

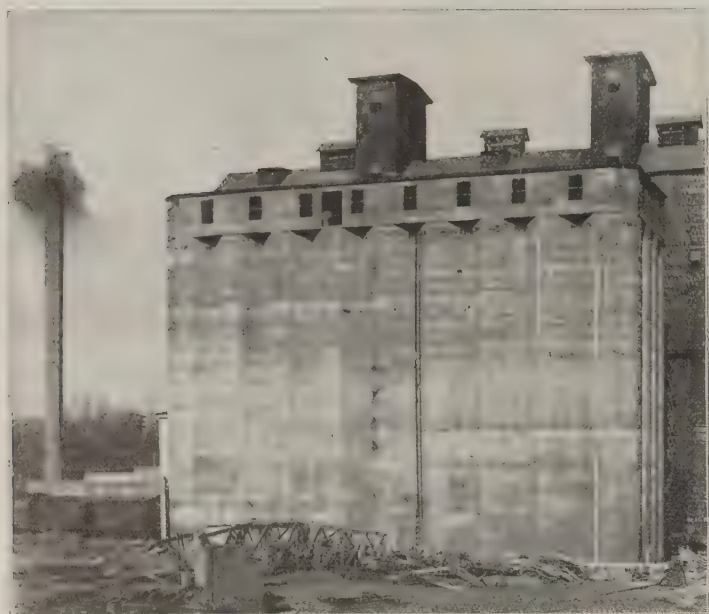
GRASS SEEDS, CLOVERS, FLAX SEED, LAWN GRASS, BEANS, PEAS, POP CORN, BIRD SEEDS, BUCKWHEAT, BAGS, ETC.

CHICAGO, ILL.

BRANCH: MINNEAPOLIS, MINN

MACDONALD ENGINEERING CO.

ENGINEERS AND CONTRACTORS



**Builders of Grain Elevators
in Wood, Steel, Concrete or
Combination Materials.**

**549-51-52-53
Monadnock Building
CHICAGO, ILL.**

John S. Metcalf Co.

Builders of

*Terminal Elevators**Concrete Storage Bins**Transfer Elevators***Drawings and Specifications**

THE TEMPLE, CHICAGO

P. H. PELKEY

118 S. Lawrence Avenue - - WICHITA, KAN.

CONTRACTOR FOR

GRAIN ELEVATORS

ALSO

Full Stock of Elevator and Mill Supplies and Scales

Elwood's Grain Tables

Show the value of any number of bushels or pounds of
WHEAT, RYE, OATS, CORN or BARLEY
at any given price from 10 cents to \$2.00 per bushel.
One of the most useful books ever offered to millers.
Indorsed by prominent millers and grain dealers.
Bound in cloth, 200 pages. Mailed on receipt of price

\$1.25

MITCHELL BROS. CO., 315 Dearborn Street, Chicago, Ill.

Witherspoon-Englar Company

—Designers and Builders of—

**FIREPROOF
Grain Elevators**

Cut shows H. W. Rogers & Bro.'s Elevator at Harvey, Ill. Operating house burned Sept. 30, 1905. Tile tanks, built by us, with contents were uninjured. This shows the advantages of hollow tile bin construction.

Designs and estimates promptly furnished
for all kinds of buildings for the handling
and storage of grain in any locality.

630 Monadnock Building, Chicago, Ill.

The Seal of Approval

is placed upon our machinery
because, it is

**RELIABLE
OF MODERN PATTERN
REASONABLE IN PRICE
THE BEST THAT'S MADE**

We are able to make prompt ship-
ments and will furnish you with
our estimate on your bill of material
if you desire.

Catalogue upon request.

Midland Machinery Company

Minneapolis, Minn.

James Stewart & Co.

CONTRACTORS

*Designers and builders of Grain Elevators
in all parts of the world.*

STEEL BRICK WOOD
CONCRETE TILE

Grain Elevator Department

1811 FISHER BUILDING

CHICAGO

W. R. SINKS, Mgr.

R. H. FOLWELL, Engr.

We also do general contracting, and have offices in
the following cities;

Write or call on any of them:

CHICAGO, ILL., 1811 Fisher Bldg.

ST. LOUIS, MO., Lincoln Trust Bldg.

NEW YORK, 130-137 Broadway

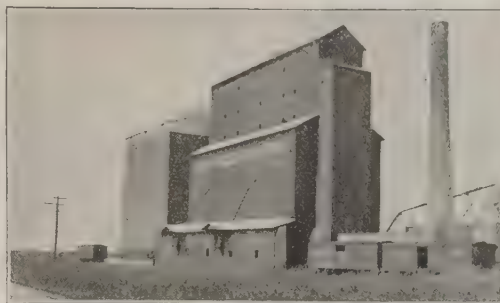
NEW ORLEANS, LA., Hibernia Bank Bldg.

PITTSBURGH, PA., Westinghouse Bldg. LONDON, ENGLAND, Savoy Hotel

G. T. HONSTAIN

Successors to HONSTAIN BROS., Contractors and Builders of

GRAIN ELEVATORS



Exchange Elevator built by G. T. Honstain, Minneapolis.
Fireproof storage capacity 250,000 bushels.
Working house capacity 150,000 bushels.

518 Corn Exchange Bldg.

MINNEAPOLIS, MINN.

Nebraska City & Ill. Ele. Co.

Chicago, 2,000,000

Bartlett, Frazier Co.

Chicago, 1,000,000

H. Rogers Co.

St. Louis, 500,000

F. H. Peavey & Co.

Minneapolis, 1,000,000

S. S. Linton & Co.

Minneapolis, 650,000

S. S. Linton & Co.

Minneapolis, 450,000

Interstate Grain Co.

Minneapolis, 500,000

City Elevator Co.

Minneapolis, 400,000

Security Grain Co.

Minneapolis, 400,000

Royal Milling Co.

Great Falls, Mont., 100,000

Jennison Bros.

Janesville, Minn., 100,000

Four hundred country elevators from 10,000 to 50,000.

The BARNETT & RECORD CO.

416 CORN EXCHANGE, MINNEAPOLIS, MINN.

General Contractors and Designers of Grain Elevators, Mill
Buildings, Docks and Warehouses.

We are prepared to use all of the various kinds of elevator construction, but
recommend our special construction known as the Record-Johnson System Patent
Fireproof Semi-Porous and Glazed Cellular Tile Grain Storage Construction, covered
by the following patents and which we have exclusive control: Patents Nos
664323, 664324, 664325, 692544, 713104.



The following is a partial list of owners and capacity of plants which we have built in the last
four years under these patents:

	Bushels.		Bushels.
Great Eastern Elevator, Minneapolis,	1,000,000	Northwestern Yeast Co., Chicago,	300,000
St. Anthony Elevator Co., "	2,200,000	Canadian Northern Ry. Co., Port	
North Star Maltng Co., "	500,000	Arthur,	2,250,000
Victoria Elevator Co., "	250,000	David Stott Milling Co., Detroit,	200,000
Frisco Ry. Elevator, Kansas City,	700,000	Pabst Brewing Co., Milwaukee,	250,000

We have under construction at the present time the following plants:

Schlitz Brewing Co., Milwaukee,	550,000	Texas City Imp. Co., Texas City, Tex.,	500,000
Washburn-Crosby Milling Co., Buffalo,	300,000	Millbourne Mills Co., Philadelphia,	200,000

The following are a few of our largest wood-constructed elevators:

Calumet Elevator, Chicago,	1,000,000	Maple Leaf Elevator, Kansas City,	1,000,000
Minnesota Annex, Chicago,	1,000,000	Burlington Elevator, St. Louis,	1,000,000
C. St. P. M. & O. Ry. Co., Itasca,	1,125,000	Grand Trunk Elevator, Portland, Me.,	1,000,000
Belt Line Elevator, Superior,	2,500,000	F. H. Peavey & Co., No. 1,	1,750,000
Superior Terminal, Superior,	2,500,000	Interstate Elevator, Minneapolis,	1,000,000
Pittsburg & West Ry., Fairport, O.,	1,000,000	Texas Pacific Ry. Co., Westwego, La.,	1,000,000
United States Milling Co., Duluth,	1,000,000	Hoosac Tunnel, Charlestown,	1,000,000
Empire Elevator Co., Minneapolis,	2,500,000	And hundreds of smaller houses.	

WRITE US FOR ESTIMATES

IT WON'T DO ANY GOOD TO STORM AROUND

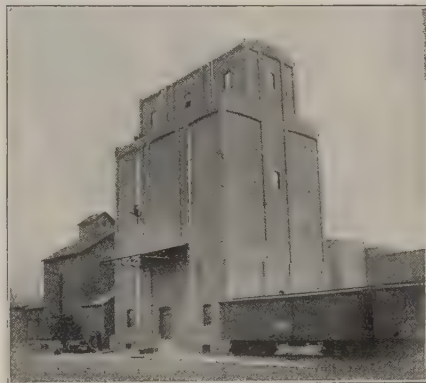
if you find later in the season
that you haven't contracted for
your elevator,
Unless you have our representa-
tive call and see you.
You can save both time and
money by contracting with us.

BURRELL ENGINEERING & CONSTRUCTION CO.

263-265 La Salle Street, Chicago



Not the Biggest Elevator in the World



BUT THE BEST
Grain Elevators
of Fireproof Brick
Construction

In Any Design

Write for Plans and Estimates

S. H. Tromanhauser

Room 3, Old Chamber of
Commerce Building

Minneapolis, - Minnesota

Riter-Conley Mfg. Co.,

Manufacturers,
Engineers,
Contractors.

Grain Elevators of Steel,

— ALSO —

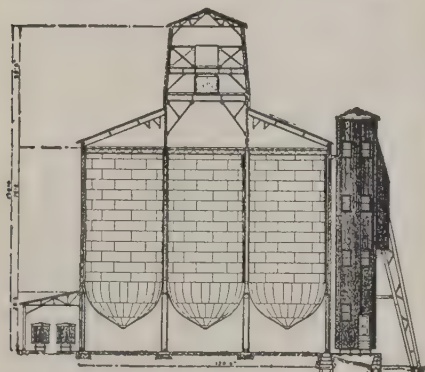
Gas Holders with Steel Tanks

Water and Oil Tanks,
Steel Buildings,
Steel Stacks and
Steel Construction of
Every Description.

Designed, Furnished and Erected
in All Parts of the World.

General Office, Water Street, Pittsburg.
New York Office, Trinity Building,
111 Broadway.

LONG-DISTANCE TELEPHONE CONNECTIONS



Cross-section of Great Northern Elevator furnished by
us at Buffalo, N. Y. Three million bushels' capacity.
Steel throughout.

STEEL STORAGE and ELEVATOR CONSTRUCTION COMPANY BUFFALO, N. Y.



1,000,000 bushel fireproof Grain Elevator constructed of steel, for the Harbor Commissioners of Montreal, Canada.

Twenty-Five Million Bushels Capacity of Our Construction Now in Use.

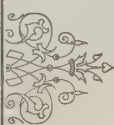
NOTHING TOO LARGE

NOTHING TOO SMALL

W. S. CLEVELAND & CO. Fireproof Construction a Specialty



**ELEVATOR
BUILDERS**



PLANS AND ESTIMATES FURNISHED

Telephone Main 1843

Corn Exchange,

MINNEAPOLIS

Barnard & Leas Mfg. Co.

MOLINE, ILLINOIS

*Designers and
Builders of*

ELEVATORS

*in Wood, Steel
and Concrete*

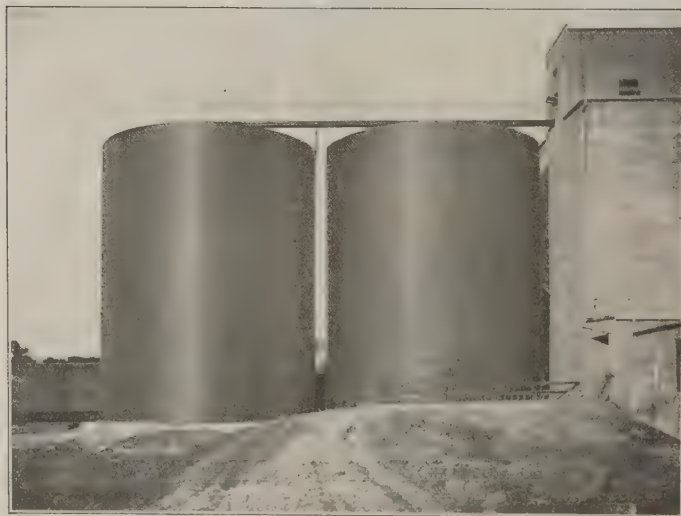
Plans and specifications for elevators
of all kinds and capacities furnished.

Write for further particulars

STORAGE TANKS AND STEEL ELEVATORS WITH FULL EQUIPMENTS

Give us the opportunity to submit you plans and estimates. We can please you. Ask us for Catalogue "A" Twin City Corliss Engine and Catalogue "F" Elevator and Power Transmitting Machinery.

Minneapolis Steel & Machinery Co.
MINNEAPOLIS, MINN.



STORAGE TANKS, 52,000 BUSHELS CAPACITY EACH

ARCHITECT AND BUILDER OF MODERN GRAIN ELEVATORS

COMPLETE PLANTS OF ANY CAPACITY--MACHINERY FURNISHED AND INSTALLED BY FIRST-CLASS MILLWRIGHTS

Correspondence Solicited

JNO. F. ROESER, Exeter, Neb.

FRED FRIEDLINE

Architect and Engineer

GRAIN ELEVATOR BUILDER

GRAIN HANDLING PLANTS

Special Construction in Reinforced Concrete Tanks and Working Houses

Local and Long Distance Telephone, Harrison 667

503 TRADERS BUILDING

CHICAGO, ILLINOIS

L. BUEGE The Grain Elevator Builder

Who Builds Right Kind of Elevators at the
Right Kind of Price

306 BOSTON BLOCK, MINNEAPOLIS, MINN.

J. A. HORN & CO. N. A. GRABILL

Designers and Builders of
Grain Elevators

Also furnishers of Elevator Supplies

LEBANON, INDIANA

Contractor and Builder of

**MODERN COUNTRY
GRAIN ELEVATORS**

Get My Plans and Estimates

DALEVILLE

INDIANA

Phone
Monroe 1614**OLSON BROTHERS & CO.**

ENGINEERS AND CONTRACTORS

Grain Elevator Construction

Power Transmission

Elevating and Conveying Machinery

160-162 N. Sangamon Street
CHICAGO

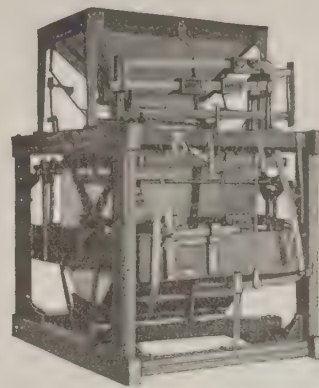
THERE IS BUT ONE "CYCLONE" DUST COLLECTOR—
"THE NO-BACK-PRESSURE"

**"1905"**

Works Closer than the "Old
Cyclone"—Why?

With the Old Cyclone the air had to be forced against and into the vortical whirl and the density of air resulting from this condition prevents the material reaching the casing.

THE KNICKERBOCKER CO.
JACKSON, MICHIGAN

**The McLeod Automatic Scale Co.**

Manufacturers of Automatic Scales for Weighing Grain,
Cement, Beans, Ore, etc. Write for Catalog

PERU, ILL.

(Copy)

Elev. on I. C. Ry. at
Colfax
Fletcher
Parnell
Fullerton

J. E. HAWTHORNE
Grain Dealer

Elev. on L. E. & W.
Holder

Bloomington, Ill., Aug. 11, '06.

To Whom it May Concern:

About three years ago we installed a McLeod Bros. Automatic Scale in our elevator at Fletcher, Ill. We found it very satisfactory, and were so well pleased with the results that last fall we put another scale of same make in our house at Colfax, Ill., also one at Parnell, Ill., and this spring one at Fullerton, Ill.

We find that with the same care that a hopper scale requires we get very satisfactory weights, and the railroad pays our claims for loss of grain in transit as readily as they do over our hopper scales, and in fact have never questioned the authenticity of same.

Yours,
J. E. HAWTHORNE.

**L. O. HICKOK**

DESIGNER AND BUILDER

GRAIN ELEVATORS

TERMINAL AND COUNTRY
in any Style or Capacity

210 FLOUR EXCHANGE

Minneapolis,

Minn.



ARE YOU getting your share of
business? If not, try
an AD. in the

**American Elevator
and Grain Trade**

Rates on Application

PATENT OFFICE RECORD.

Numbers 592,691 and 820,680 cover
the only legal patented gravity Grain
Purifier on record and on the market
Write to

D. H. STUHR,

Davenport, Iowa



J. B. DUTTON'S Patent Automatic Grain Scale.

FOR USE IN

ELEVATORS, DISTILLERIES, MALT HOUSES, FLOUR MILLS, ETC.

ACCURATE AND RELIABLE AT ALL TIMES. SCALES SENT ON 30 DAYS' TRIAL.
SEND FOR CIRCULAR AND PRICE LIST.

Address

J. B. DUTTON, 1026 and 1028 Scotten Ave., DETROIT, MICH.

American Transmission R O P E

In your elevator or mill will give best results. Contains more manila hemp per foot, has the initial stretch taken out of the strands and we guarantee it to stretch less than any other brand.



40 H. P. Angle Drive Through 16-inch I-Beam

Write for samples and prices
No orders too large or too small to receive our careful attention.

The American Mfg. Co.

Manila—Sisal—Jute—Cordage

65 Wall Street - - NEW YORK
85 Kinzie Street - - CHICAGO

The Blue Book of Rope Transmission free upon request

Howe Engines

Get the Best

Power that is reliable and specially suited to mill and elevator men's needs. The engines famous for **easy starting**, perfect operation and uniform high grade construction. **Howe Standard Scales**

of the protected BALL BEARING kind that weigh correctly and wear everlastingly. Used all over the world. All kinds and sizes. Also Trucks, Grain Scoops and Testers, Letter and Way Bill Presses, etc.

Catalog free.

HOWE SCALE CO.
OF ILLINOIS,
61 Lake St. CHICAGO

DUST! DUST!



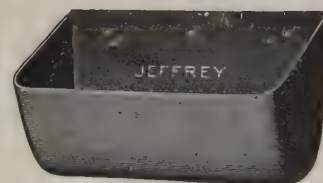
GIBB'S PATENT DUST

PROTECTOR is invaluable to operatives in every industry where dust is troublesome. It has been thoroughly tested for many years in every kind of dust and is the only reliable protector known. **Perfect ventilation.** Nickel-plated protector, \$1, postpaid. Circulars free. Agents Wanted.

GIBB'S RESPIRATOR CO.,

"B," 124 East Ave., Oak Park (Chicago), Ill.

JEFFREY ELEVATING CONVEYING MACHINERY



Standard Elevator Buckets

For Handling Grain, Cereals, Flour, Seeds, Etc.

Our specialties include: Chains, all styles, Sprocket Wheels, Elevator Buckets, Boots, Bolts, Spiral Conveyors, Cable Conveyors, Rubber Belt Conveyors, Package Conveyors, Barrel Elevators, Keg Elevators, Shafting, Hangers, Pulleys, Collars, Gearing, Labor-Saving Devices of all kinds.

Send us specifications of your wants in our line; we can probably save you some money. For catalogue address

THE JEFFREY MFG. CO., Columbus, O.

PLAIN GAS ENGINE SENSE

By E. L. OSBORNE

A BOOK for the man who has a gas or gasoline engine and wants to operate it to the best advantage.

The book is written in plain language and thoroughly covers the field of gas engine operation.

125 Pages of Practical Suggestions

PRICE 50 CENTS

MITCHELL BROS. CO., 315 DEARBORN STREET, CHICAGO, ILL.

Progressive Grain Men

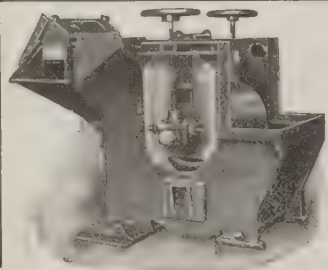
Are interested in all phases of the grain business, the milling as well as the marketing of grain. They aim to keep in touch with the consuming trade and know what becomes of their grain in the markets of the world. Such men find the

AMERICAN MILLER

a big help because it fully covers the business of milling wheat and other cereals.

Published on the first of each month, it gives all the news of the milling world and prints a large amount of technical matter that is of interest to the elevator man as well as the miller.

We will send the American Elevator and Grain Trade and American Miller to one address for one year at the combination price of \$2.50. Send in your subscription now.



NO ESCAPE:

There is no escaping a "choke" with the ordinary boot. Either the boot itself will "choke" or you must "choke" your business to prevent it. That is to say, shut off the feed gate, run the cups half full, spend your whole time watching them do half duty, consuming power, and in constant fear, even then, of a "choke."

Elevating grain with the ordinary boot is imperfect and unsatisfactory and no operator was ever possessed.

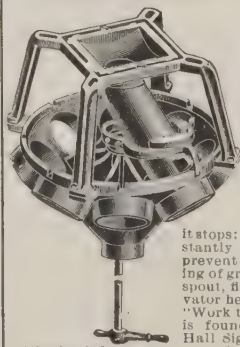
HALL NON-CHOKABLE BOOT will double the amount elevated; being automatic it requires no attention, consumes less power and will never "choke" with shelled grain. Sent on trial.

Send for Catalogue "D"

HALL DISTRIBUTOR CO.

506 First Nat. Bank Bldg. OMAHA, NEB.

THE HALL SIGNALING DISTRIBUTOR



6-inch, 8 ducts

it stops; he must be constantly on the alert to prevent trouble—mixing of grain, clogging of spout, filling up of elevator head, etc.

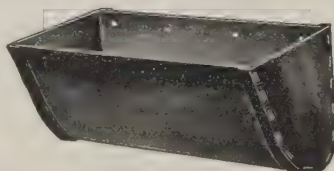
"Work that's Pleasure" is found wherever a Hall Signaling Distributor is used, because it entirely overcomes the troubles referred to. Better let us tell you how?

Sent on Trial. Send for Booklet.

Hall Distributor Co.

506 First National Bank Bldg., Omaha, Neb.

CLEVELAND ELEVATOR BUCKET CO., Manufacturers of the "FULLER" PATENT STEEL ELEVATOR BUCKETS



Suitable for Mills, Elevators, Ear Corn, Cobs, Clay, Ores, Broken Stone, Coal, Sand and other extra heavy substances. General Office and Works: 225 St. Clair St., Cleveland, O., U. S. A.

BE SURE

To equip your Grain Elevator Building with our light self-lifting passenger lifts. Strong and substantially made.

INEXPENSIVE, QUICK

No more work climbing stairs. Cost no more than stairways and take up one-quarter the room.

Correspondence invited.

SIDNEY ELEVATOR MFG. CO.

Sole Manufacturers SIDNEY, OHIO

TO THE GRAIN DEALER WHO THINKS FOR HIMSELF!

WE MAKE 150 styles and sizes of Shellers.
DON'T YOU THINK we have what you need?

NEW PROCESS CORN SHELLERS

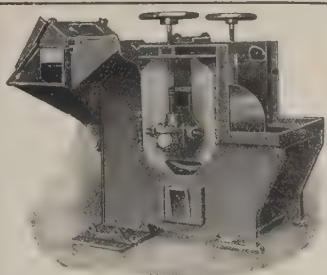
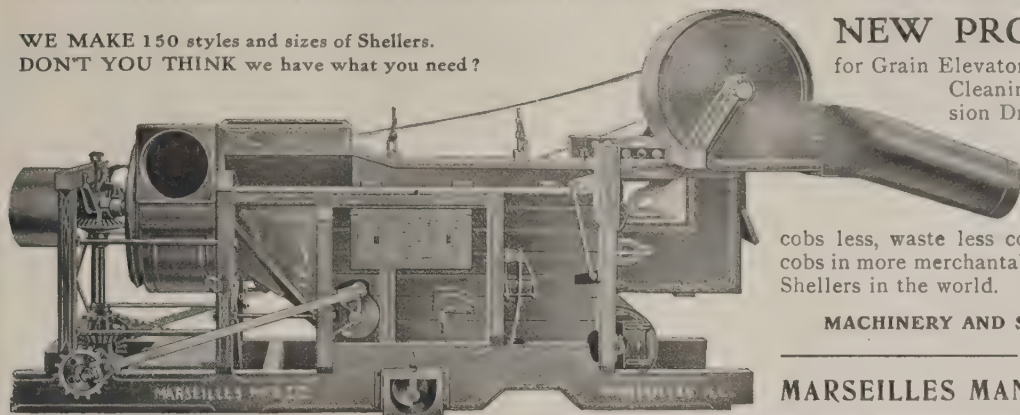
for Grain Elevators and Mills are made either with or without Cleaning Apparatus; with or without Feeder, Extension Drag-feeder, Shelled Corn Elevator, Cob-Carrier or Shuck Separator.

THEY REQUIRE LESS SPACE AND POWER according to capacity, crack less corn, break cobs less, waste less corn, clean the corn more perfectly, clean the cobs in more merchantable condition for fuel, than any other Cylinder Shellers in the world. What do you think? Is it not money to you?

MACHINERY AND SUPPLIES of Every Kind For the Grain Man

SEND FOR CATALOGUE

MARSEILLES MANUFACTURING CO., Marseilles, Ill.



A Choked Boot is an ABOMINATION

It is expensive in delays, in labor, in cups and belts, in wasted, mixed and damaged grain, in interrupted business. It is folly or insanity to bungle one's effort in such futility. The time is not far distant when shame alone will estop its occurrence.

Catalogue "D" Hall Non-Chokable Boot—of the—graphically elucidates this subject. Its perusal will interest any elevator owner or designer.

HALL DISTRIBUTOR CO.
506 First Nat. Bank Bldg. OMAHA, NEB.

THERE IS BUT ONE "CYCLONE" DUST COLLECTOR—
"THE NO-BACK-PRESSURE"



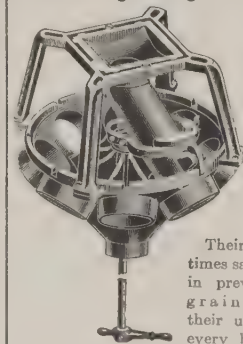
"1905"

Works Closer than the "Old Cyclone"—Why?

With the Old Cyclone the air had to be forced against and into the vortical whirl and the density of air resulting from this condition prevents the material reaching the casing.

THE KNICKERBOCKER CO.
JACKSON, MICHIGAN

Hall Signaling Distributors



do everything you want done in the matter of grain distribution. They do it all perfectly and conveniently.

Their cost is sometimes saved in one day, in preventing mixed grain alone. With their use, you utilize every bushel of your bin room. They are invaluable.

Hall Distributor Co.
508 First National Bank Bldg., Omaha, Neb.

AIR DRIED GRAIN

(NOT KILN DRIED)

The Ellis Drier insures even and perfect drying at low temperatures. The only machine where the air passes through the grain uniformly and reaches every kernel. Built in all sizes from five bushels' capacity and up.

"Ellis Grain Drier"

ELLIS DRIER CO.

715-719 Postal Telegraph Bldg.

Chicago



Fairbanks Automatic Scales

For Continuous, Uniform and Accurate Weighing of Grain.

FAIRBANKS Standard Track and Hopper Scales, used the world over.

FAIRBANKS-MORSE

Gas, Gasoline or Oil Engines are cheaper than Steam, Burning Cobs as fuel. Require no attention after starting, thus dispensing with engineer

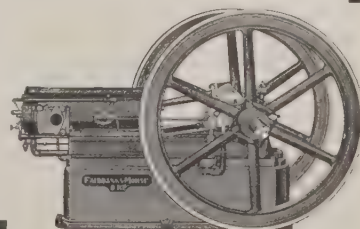
Steady, Reliable Power.

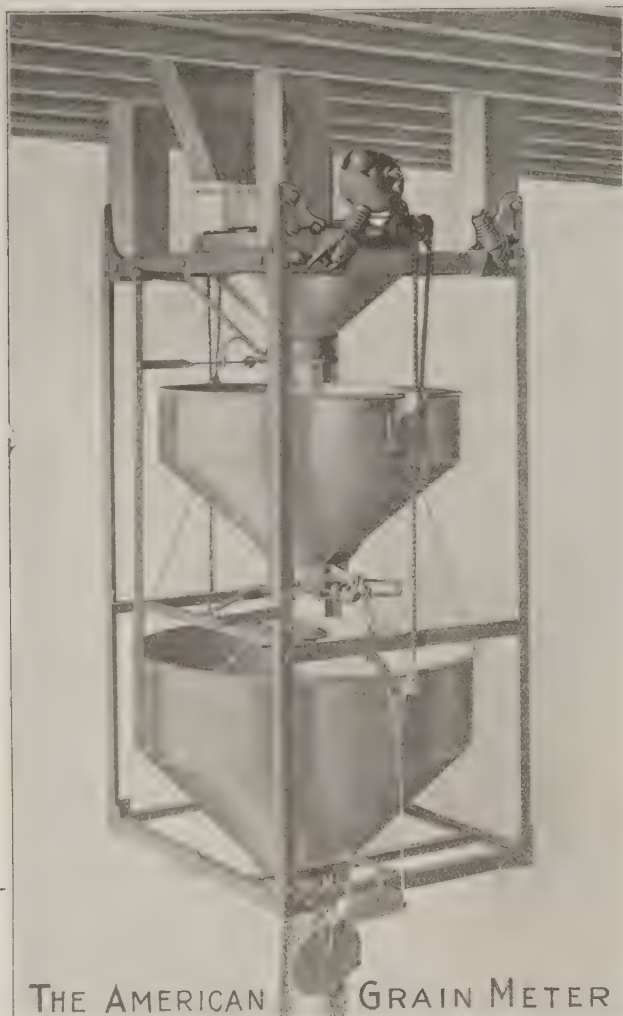
Let Us Bid on Your Mill and Elevator Equipment.

Send for Catalog N 544 'G. R.

FAIRBANKS,
MORSE & CO.

Monroe Street Chicago, Ill.





THE AMERICAN GRAIN METER

Is the AMERICAN GRAIN METER Accurate?AFFIDAVITState of Ohio, }
Champaign Co., } ss.

AMERICAN GRAIN METER

VS.

R. R. TRACK SCALES

We, the undersigned, hereby certify that on June 15th and 16th, 1906, we weighed the corn loaded into Erie cars No. 71904 and No. 107097 at the elevator of J. L. Bowlus, at Bowlusville, Ohio.

The empty cars were first weighed on R. R. Track Scales, which had recently been tested. They were then loaded, the corn passing through an American Grain Meter, which automatically weighed and registered it. The loaded cars were then weighed.

The results were as follows:—

	Car No. 71904	Car No. 107097
Net weight, Track Scales—	50,400 lbs.	50,568 lbs.
Weight, American Grain Meter—	50,380 lbs.	50,630 lbs.

Variation - - - - 20 lbs. 62 lbs.

It rained on Car No. 107097 while it was being loaded and also on the track scales, which would reduce the variation of 62 lbs.

T. G. Powers,
weighmaster for A. B. Payne & Utah, O.
J. L. Bowlus.

Signed and sworn to before me this 16th day of June, 1906.

M. M. Rock Justice of the Peace
In and for Champaign Co.

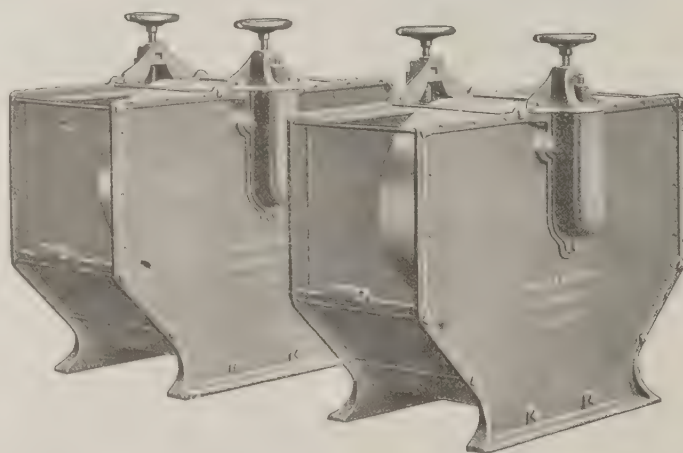
AMERICAN GRAIN METER **ACCURATE**
RELIABLE
PRACTICAL**—Automatic Grain Weigher for the Country Elevators—**

For further information address

AMERICAN GRAIN METER CO., Springfield, Ohio

Great Western Mfg. Co., Kansas City
Allen P. Ely & Co., . . . Omaha
Brown & Varney, . . . Cincinnati
Maheu & Coyle, . . . St. Louis

J. R. Detweller, . . . Chicago
Robert Craig, . . . Minneapolis
Wm. Robinson, . . . Des Moines
The Howe Scale Co. of Ill., Cleveland, O.
Thomas McFeely Co., Philadelphia.

ELEVATOR SUPPLIES

You want first class Heads and Boots for your Elevator. We make them in iron and wood, and of all sizes.

You need Cups. We have a large department where Elevator Buckets are made in thousands.

We always carry a large stock of standard sizes and can fill orders promptly.

Our Buckets are well made of the very best materials and we supply many jobbers. You might as well buy direct from the factory of

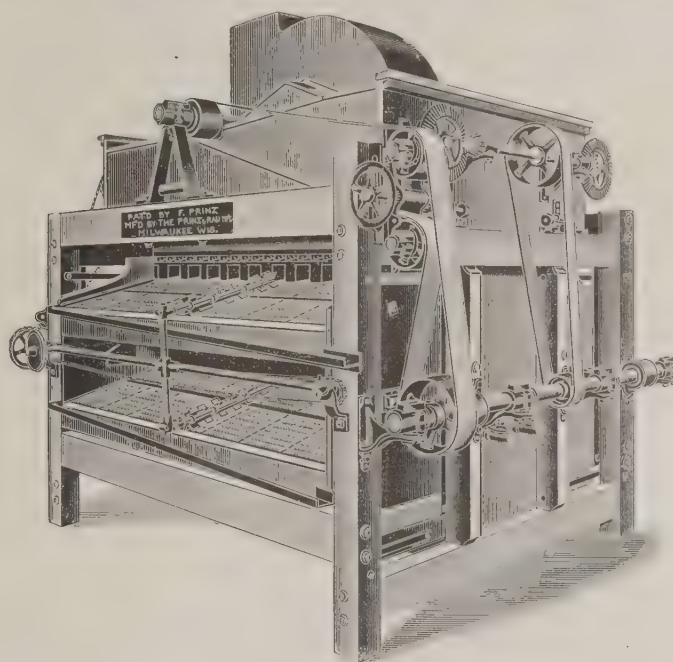
NORDYKE & MARMON CO.

America's Leading Mill Builders

INDIANAPOLIS, INDIANA

THE PRINZ IMPROVED AUTOMATIC SEPARATOR FOR WHEAT, OATS OR BARLEY

—○—
**LARGE
CAPACITY**
—○—



—○—
**LIGHT
RUNNING**
—□—

**THE ONLY SEPARATOR ON THE MARKET THAT MAKES
PERFECT SEPARATIONS ALL THE TIME**

BECAUSE it has a roll feeder controlled by a sensitive feed gate, which distributes the grain evenly over the full width of sieve.

BECAUSE it has a patented sieve cleaner working on top of the sieves, and does not depend on irregular hand cleaning.

BECAUSE it has a wide sieve with a short travel, taking the fine seeds out at the head of each sieve.

BECAUSE the perforations in the sheet steel sieves do not increase in size by wearing, as they do in zinc-covered sieves.

BECAUSE the machine is supplied with large, slow-running fans, which make perfect air separations.

FOR FULL PARTICULARS IN REGARD TO PRICES AND CAPACITIES, ADDRESS

The Prinz & Rau Manufacturing Co.
MILWAUKEE, WISCONSIN

Section of
Old Style FlightSection of
Helicoid Flight

HELICOID

Helicoid conveyor has a stronger flight and a heavier pipe than the same diameter of old style conveyor, and

Helicoid flight and pipe are put together so they support and strengthen each other.

Helicoid flight has a shovel edge. Other has blunt edge.

Helicoid flight is one continuous strip of metal end to end of pipe. Other is short sections lapped and riveted together every turn or half turn around the pipe.

Helicoid is a smooth, nicely-balanced spiral, and has no joints to wear out and open up.

Helicoid requires fewer repairs, and less power to drive it.

Helicoid costs no more than inferior kinds of conveyor; it's all-round satisfaction at the same price.

Ask about our Steel Conveyor Boxes, too.

H. W. Caldwell & Son Co.

17th St. and Western Ave., Chicago

BRANCH OFFICE:
No. 95
Liberty St.,
New York City

AGENTS:
Woodward, Wight
& Co.,
New Orleans, La.

"SOLVAY" CALCIUM CHLORIDE

MAKES THE BEST NON-FREEZING WATER JACKET SOLUTION
For Gas and Gasoline Engines.

Freezing point 54° below zero Fahr. Cheaper and better than oil and all other circulating fluids.

THE BEST SOLUTION FOR FIRE BUCKETS.

CARBONDALE CHEMICAL COMPANY,

722 Unity Building, CHICAGO, ILL.

CARBONDALE, PA.

Protect yourself against losses of grain
by leakage in transit by using the

Kennedy Patent Paper Car Liner

EFFECTIVE—CHEAP

Grain dealers are invited to investigate.
Full description and price on application.

FRED W. KENNEDY

PATENTEE AND MANUFACTURER

SHELBYVILLE,

INDIANA

BE CAREFUL about FORMING AN OPINION as to the

EFFICIENCY OF AUTOMATIC SCALES

before you have seen the

Richardson Improved Automatic Weighers

IN OPERATION



May be seen in almost every
PROMINENT MILL
Many Elevators and
Grain Houses

"The Richardson Portable Automatic Scale, installed last June, has been very satisfactory. We now get correct weights and rapid work—something we did not get from the old style of hand weighing and sacking."

EMPIRE GRAIN CO.,
Fort Worth, Texas.

RICHARDSON SCALE COMPANY

1314 Park Row, NEW YORK

1011 Rector Bldg.
CHICAGO

1012 Hibernian Bank Bldg.
NEW ORLEANS

415 Third St., So.
MINNEAPOLIS

A COMPLETE LIST of Grain Elevators and Grain Storage Warehouses IN CHICAGO AND COOK COUNTY

with notes of their construction, terminal facilities, etc., for use of railroads, commission men, insurance companies and others. Compiled and published by the "American Elevator and Grain Trade." Price 25 cents.

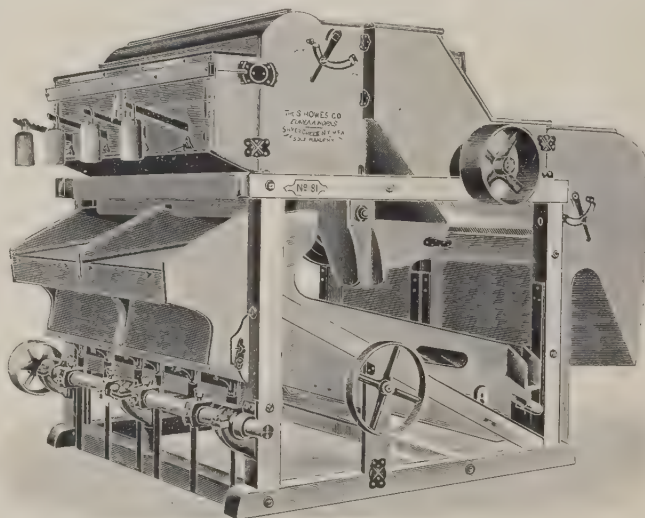
For Sale by MITCHELL BROS. CO., 315 Dearborn St., Chicago, Ill



THE "Eureka" Counterbalanced Elevator Cleaner



WITH AUTOMATIC SIEVE CLEANERS.
NO VIBRATION. LARGE CAPACITY. CLOSE SEPARATIONS.
SELF-OILING BEARINGS. NO ATTENTION REQUIRED.



We supply every requirement in the grain cleaner line with the highest grade machines. Correspondence solicited.



THE S. HOWES CO.

"Eureka" Works, SILVER CREEK, N. Y.



STUDY THE THERMOMETER

Before Placing GRAIN INSURANCE

Permanent or Short Term

At the same basis rate, it shows what the straight premium companies charge for a full year, and the increase in per cent for a few months, as compared with the cost in the



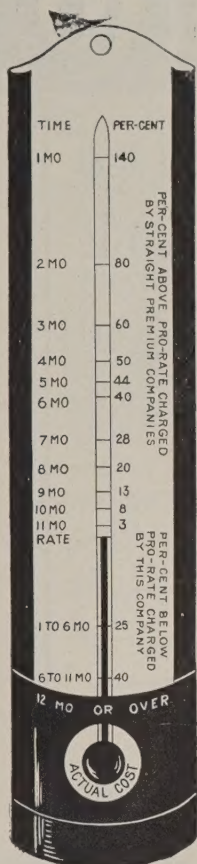
INDIANAPOLIS, IND.

Insurance should be increased or decreased according to the value of the grain. This cannot be afforded when, for, say, only four months, the cost is 50 per cent above pro rata.

Necessary insurance can surely be afforded at our charges, which are considerable below pro rata. We make a definite charge per month on each \$1,000, low enough to offset some of the losses due to the car shortage.

You will note that the cost for a full year is a larger per cent saving than short term. That is an argument to place all your insurance with us. For particulars write.

C. A. McCOTTER, Secretary



A HESS DRIER

at your elevator will pay for itself before May 1st.

WE MAKE BIG ONES

like those we built at Newport News, Baltimore, Boston, New Orleans, Galveston and other exporting points.

WE MAKE A SMALL ONE

the "Ideal," for smaller elevators, mills, etc., which is just as good a money maker in proportion.

Let us tell you more about them.

Hess Warming & Ventilating Co.

710 Tacoma Bldg., Chicago

SCIENTIFIC

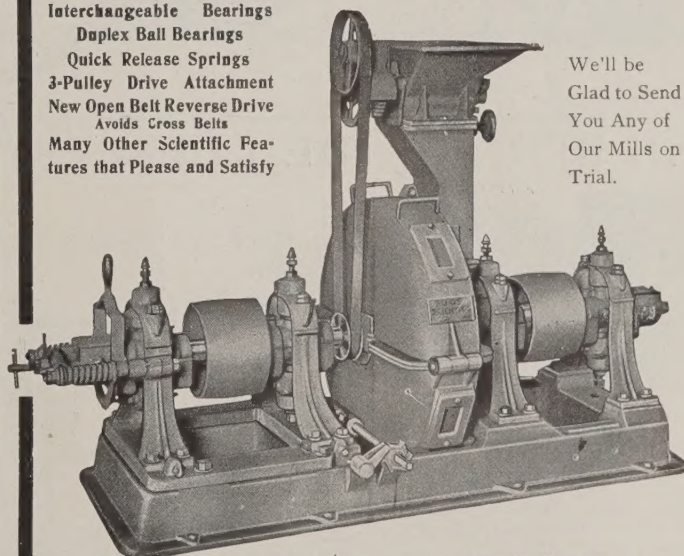
ATTRITION MILLS

GRIND FOR
PROFIT

Exclusive Features

Interchangeable Bearings
Duplex Ball Bearings
Quick Release Springs
3-Pulley Drive Attachment
New Open Belt Reverse Drive
Avoids Cross Belts
Many Other Scientific Features that Please and Satisfy

We'll be Glad to Send You Any of Our Mills on Trial.



A Live Member of That Vigorous "Best on Earth" Family

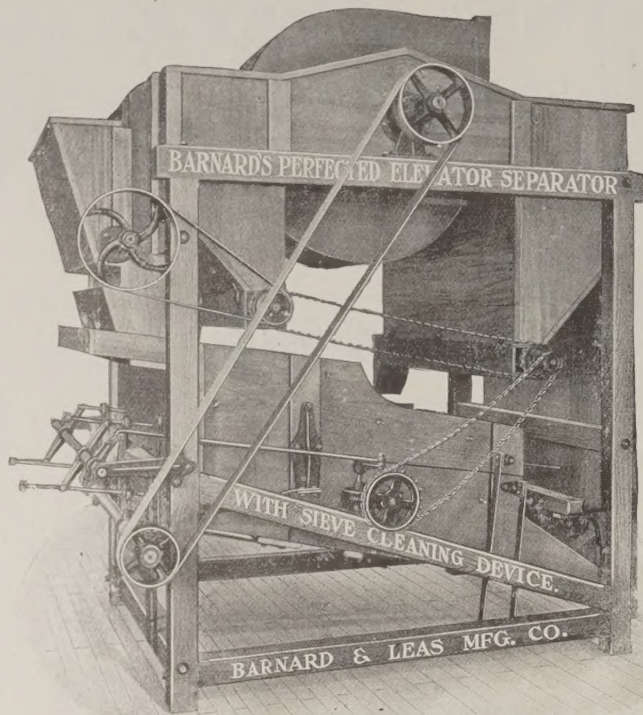
Grinds Ear Corn, Chop Feed, Bran, Offal and all Small Grains, Cracks Corn.

Fast, Fine Grinding

THE FOOS MFG. CO.
SPRINGFIELD, OHIO.

SEND FOR CATALOGUES

Barnard & Leas Mfg. Co.



Barnard's Perfected Warehouse and Elevator Separator
With Sieve Cleaning Device

Insures Positive and Uniform Work

The Sieve Cleaning Device on Barnard's Perfected Separator works underneath the sieves. Thus it lifts the trash out of the holes and causes it to tail over instead of assisting it to pass through with the grain. This results in keeping the sieves perfectly clean at all times and insures positive and uniform work.

We also make

The Cornwall Corn Cleaner,

The Victor Corn Sheller,

Willford's Light Running Three Roller Feed Mill,

Barnard's Two and Three Pair High Feed Mills,

and a complete line of Flour Mill and Elevator Machines and supplies.

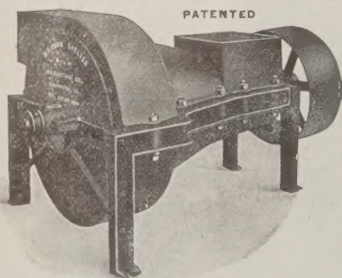
Send for latest catalogue.

MOLINE

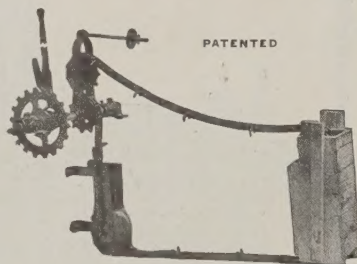


ILLINOIS

THE BEST IS THE CHEAPEST



United States Corn Sheller



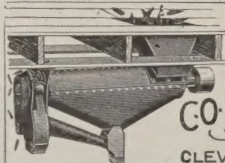
B. S. C. Chain Feeder and Conveyor

Send for Our Catalogue and Latest Discounts
Complete Elevator Equipments

B. S. CONSTANT CO., BLOOMINGTON, ILL.

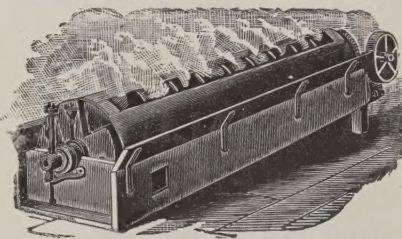


Minster Friction Clutch with extended sleeve sold by dealers, or address The Minster Machine Co., Minster, Ohio, Mfrs. of Friction Clutches, Pulleys, Cut-off Couplings and Power Transmission Appliances.



TRIUMPH
POWER
CORN SHELLER
CO. BARTLETT
& CO.
CLEVELAND O.

SEE THAT YOUR
CONTRACTS CALL FOR



THE
**CUTLER
STEAM
DRYER**

SOLD BY ALL MILL FURNISHERS

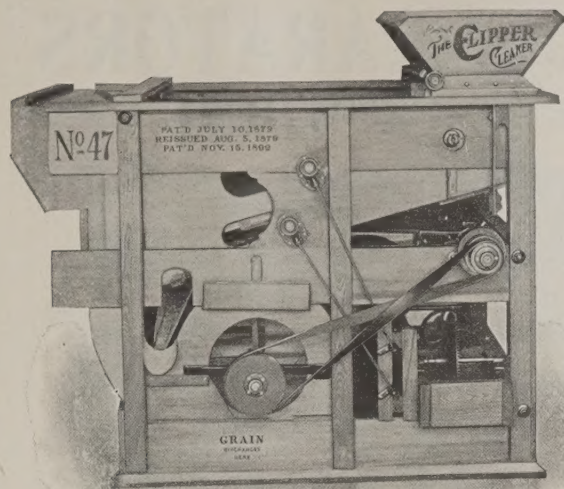
Not an Experiment. In successful use 25 years drying

CORN MEAL AND HOMINY,
BREWERS' GRITS AND MEAL,
BUCKWHEAT, RICE AND
ALL CEREAL PRODUCTS.

ALSO SAND, COAL DUST, GRAPHITE, CLAY AND ORES

Automatic in operation, requiring no attention. Double the capacity of any other Dryer sold for same price.

THE CUTLER CO., North Wilbraham, Mass.
CATALOG ON REQUEST.

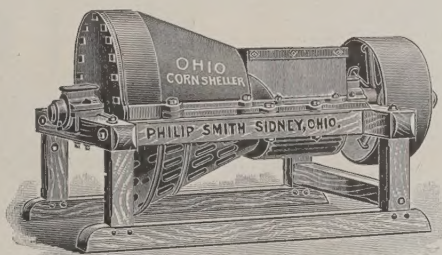


The No. 47 Clipper Cleaner

is unequalled for handling seeds or grain in local elevators. This machine has Traveling Brushes on the screens which enables you to keep it working to its full screen capacity all the time. It is very light running, strongly built, easily installed and simple in operation. We guarantee this Cleaner to give perfect satisfaction on clover seed, timothy or any kind of grain and it can be operated with

one-fourth the expense for power of any suction cleaner on the market. It will not require over one-half of one horse power on clover or any kind of seed, nor over one horse power on grain. If you are looking for a first-class, up-to-date cleaner of moderate capacity, we would be glad to send you catalog and give prices and particulars upon request.

A.T. FERRELL & CO., Saginaw, W.S., Mich.



Corn Shellers

Corn Cleaners

Drags, Dumps, Etc.

When you want any machinery
or supplies for your elevator,
write us for prices :: :: ::

THE PHILIP SMITH CO.
SIDNEY, OHIO

THE WEST LEADS IN EVERYTHING

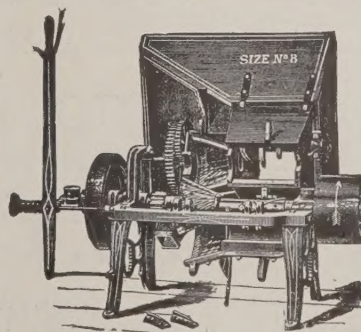
Western people are continually working to make things "just a little bit better." They hustle day in and day out, keeping their business methods strictly up to date. That's why they keep ahead.

For more than thirty years it has been our policy to build and equip grain elevators, "a whole lot better" than the other fellow, and we have done it. That's why we have so many satisfied patrons. Are you one? If not, get in line to-day by sending us your specifications.

GREAT WESTERN MFG. CO.
LEAVENWORTH, KANSAS

Bowsher's All-Around Feed Mill

(Sold with or without sacking elevator)



It CRUSHES ear corn (with or without shucks) and GRINDS all kinds small grain and KAFFIR IN THE HEAD. Has CONICAL shaped GRINDERS, DIFFERENT FROM ALL OTHERS. RUNS LIGHT. Can run EMPTY WITHOUT INJURY. Ahead of rolls or stones in speed and quality of work.

YOU NEED a mill now. QUIT THINKING about it. COMMENCE to investigate. Give US a chance and we'll tell you WHY we think ours is the best.

SEVEN SIZES : 2 to 25 H. P.

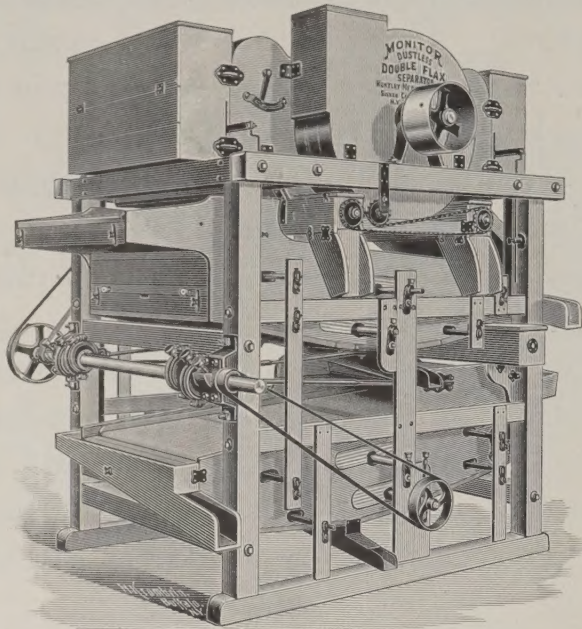
Circular sent for the asking.

Drive pulley overhung. Belt to it from any direction.
Makes complete independent outfit.

THE N. P. BOWSHER CO., South Bend, Ind.

FOUR PEERLESS FLAX SEPARATORS

ENDORSED BY THE TRADE EVERYWHERE



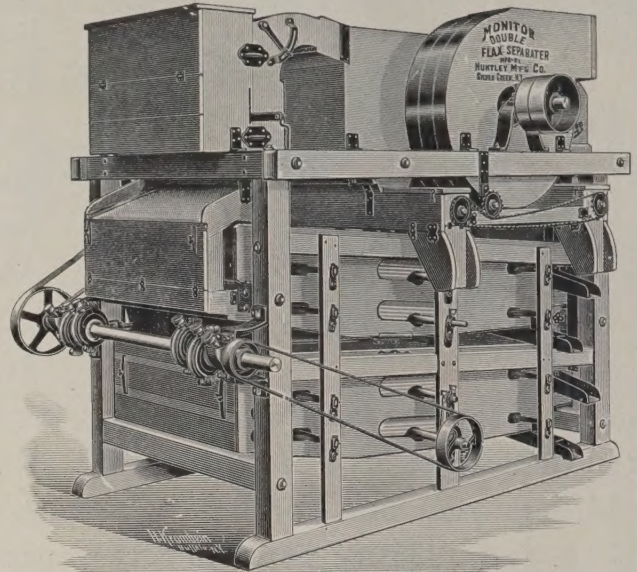
**Monitor Dustless Double Flax Separator
Style A**

HUNTLEY MFG. CO., Silver Creek, N. Y.

NORTHWOOD, N. DAK.

GENTLEMEN:—The Flax Cleaner installed in our Elevator by Honstain Bird Co. of Minneapolis, Minn., has given us the best of satisfaction both for flax and grain. It is a good cleaner.

FARMERS ELEVATOR CO.,
M. V. Zinwell, Pres.



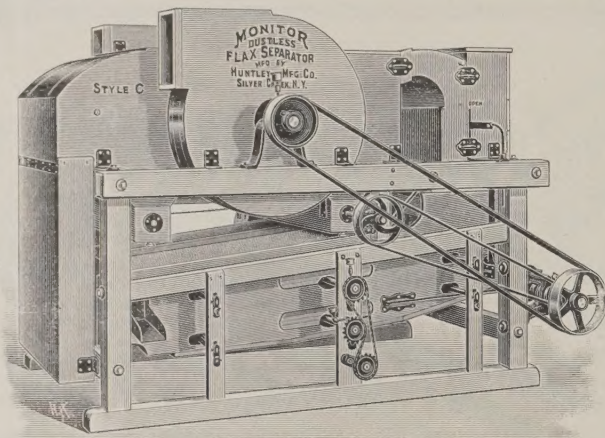
**Monitor Dustless Double Flax Separator
Style B**

WINNIPEG, MAN.

THE VULCAN IRON CO., Winnipeg, Man.

DEAR SIR:—In reply to your inquiry, we beg to state that the Monitor Double Flax Separator No. 4 B, that you sold us last fall has been very satisfactory. We have not tested it up to its full capacity, but we are entirely satisfied with it.

Yours truly,
J. A. BODY & CO.



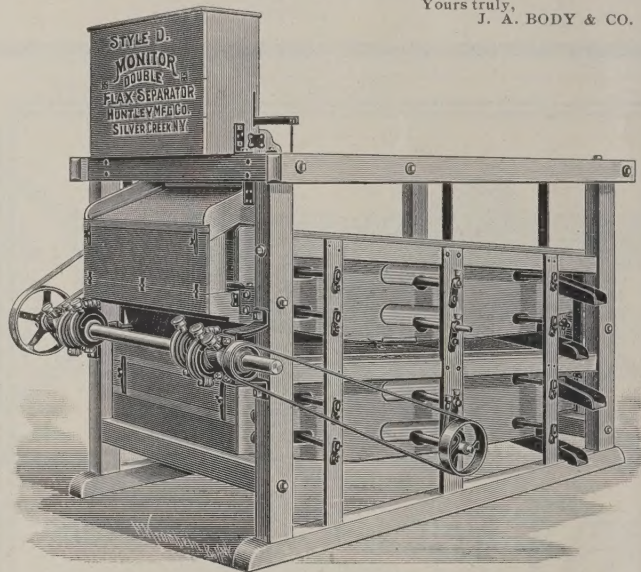
**Monitor Dustless Single Flax Separator
Style C**

HUNTLEY MFG. CO., Silver Creek, N. Y.

RED WING, MINN.

GENTLEMEN:—Answering your favor of the 19th inst., we take pleasure in saying that we purchased one of your large Flax Cleaning Machines about a year ago and the same has been used in our Mills since that time. The machine does the work in a first-class manner and we find same entirely satisfactory.

Yours truly,
RED WING LINSEED MILLS.



**Monitor Double Flax Separator
Style D**

HUNTLEY MFG. CO., Silver Creek, N. Y.

SLEEPY EYE, MINN.

GENTLEMEN:—Your favor of the 19th inst. received. In reply will state that we have been using one of your Flax Cleaners in our cleaning house since 1901, and the same gives good satisfaction. We find that this machine will clean from 450 to 500 bushels per hour.

Yours truly,
SLEEPY EYE MILLING CO.

ASK THE MAN WHO OWNS ONE — HE KNOWS !
Or write us for further information and complete catalog all about flax and flax machinery

HUNTLEY MFG. CO., Silver Creek, N.Y.

BRANCH OFFICES:

302 Traders Building, Chicago, Ill. F. M. Smith, Agent
175-181 4th Ave., South, Minneapolis, Minn., A. F. Shuler, Agent
121 Front St., New York, N. Y., J. W. Perrine, Agent
No. 10, Board of Trade, Kansas City, Mo., H. C. Draver, Southwestern Agt.
Berger, Carter Co., Pacific Coast Agents, Mississippi and 17th Sts., San Francisco, Cal.
A. S. Garman, General Agent, Akron, Ohio.